AWIPS OB3 Release Notes

Section III - Current Problems to be Fixed in a Future Release

D2D/	TEXT/OTHER APPLICATIONS	3-3
1.1	AWIPS Verification Program (AVP)	3-3
1.2	Climate	
1.3	Color Curve/Blinking/Image Combination	3-7
1.4		
1.5		
1.6	Local Storm Report (LSR)	
1.7	•	
1.8		
1.9	NCEP/Redbook Graphics	
1.10	NMAP	. 3-14
1.11	Procedures/History List	. 3-14
1.12	Product Maker	
1.13	Radar	. 3-15
1.14	Satellite	. 3-18
1.15	Surface	. 3-18
1.16	System for Convection Analysis and Nowcasting (SCAN) and Flash Flood	
	Monitoring Program (FFMP)	. 3-22
1.17	System on AWIPS for Forecasting and Evaluation of Seas and Lakes	
	(SAFESEAS)	. 3-23
1.18	Text Alarms/Warnings	. 3-23
1.19	Text Product	. 3-24
1.20	Text Workstation	. 3-25
1.21	Tools	. 3-27
1.22	Upper Air	. 3-28
1.23	Volume Browser/Grid Products	. 3-30
1.24	Warning Generation (WarnGen)	. 3-32
INTE	ERACTIVE FORECAST PREPARATION SYSTEM (IFPS)/WATCH	
WAR	RNING ADVISORY (WWA)	. 3-33
HYD	ROLOGY	. 3-36
3.1	HydroBase	
3.2	HydroMap/Multisensor Precipitation Estimate (MPE)	. 3-37
3.3	National Weather Service River Forecast System (NWSRFS)	. 3-37
3.4	SiteSpecific	
3.5	WHFS	
LOC	AL DATA ACQUISITION AND DISSEMINATION (LDAD)	. 3-39
	1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12 1.13 1.14 1.15 1.16 1.17 1.18 1.19 1.20 1.21 1.22 1.23 1.24 INTH WAF HYD 3.1 3.2 3.3 3.4 3.5	1.2 Climate 1.3 Color Curve/Blinking/Image Combination 1.4 Display 1.5 Local Analysis and Prediction System (LAPS) 1.6 Local Storm Report (LSR) 1.7 Looping/Sampling/Swapping Panes/Zooming 1.8 Map Features/Legends 1.9 NCEP/Redbook Graphics 1.10 NMAP 1.11 Procedures/History List 1.12 Product Maker 1.13 Radar 1.14 Satellite 1.15 Surface 1.16 System for Convection Analysis and Nowcasting (SCAN) and Flash Flood Monitoring Program (FFMP) 1.17 System on AWIPS for Forecasting and Evaluation of Seas and Lakes (SAFESEAS) 1.18 Text Alarms/Warnings 1.19 Text Product 1.20 Text Workstation 1.21 Tools 1.22 Upper Air 1.23 Volume Browser/Grid Products 1.24 Warning Generation (WarnGen) INTERACTIVE FORECAST PREPARATION SYSTEM (IFPS)/WATCH WARNING ADVISORY (WWA) HYDROLOGY 3.1 HydroBase 3.2 HydroMap/Multisensor Precipitation Estimate (MPE) 3.3 National Weather Service River Forecast System (NWSRFS) 3.4 SiteSpecific

	4.1	BBS Interface	. 3-39
	4.2	Emergency Manager Decision Support (EMDS - Web Dissemination)	. 3-40
	4.3	Fax	. 3-48
	4.4	Ingest and Display	. 3-48
	4.5	Scheduler	. 3-49
	4.6	Triggers	. 3-49
5.0	SYSTEM		
	5.1	Decoders	. 3-49
	5.2	Failover/Reboot	. 3-50
	5.3	General	. 3-56
	5.4	Localization/Installation	. 3-57
	5.5	On-Line User's Guide	. 3-60
	5.6	Printing	
	5.7	Product/Process/System Monitoring	. 3-61
	5.8	Radar System	. 3-62
	5.9	Site Specific/National Centers	. 3-65
	5.10	System Process/Log	. 3-65
	5.11	Wide Area Network (WAN) Communication/Message Handling	. 3-71
6.0	осо	NUS	. 3-72
	6.1	Hydrology	. 3-72
	6.2	Install/Localization	. 3-72
	6.3	IFPS/WWA	. 3-72
	6.4	LAPS	. 3-73
	6.5	Map Features/Legends	. 3-73
	6.6	Product Maker	. 3-74
	6.7	Satellite	. 3-74
	6.8	System Process/Log	. 3-74
	6.9	Volume Browser/Grid Products	
7.0	Addit	tional Radar-Related DRs	3-75
8.0	Addit	tional WarnGen Related DRs	. 3-76

For more information concerning AWIPS functionality, please refer to the AWIPS User's Manual online at: http://isl715.nws.noaa.gov/awipsdoc

1.0 D2D/TEXT/OTHER APPLICATIONS

1.1 AWIPS Verification Program (AVP)

• **Problem:** If the Verification Editor is left open, fields can be edited even after the cccVERxxx message is formatted. (**DR 5202**)

If the Verification Editor is left open over a period of time when one or more messages are formatted and transmitted (around 1130Z and 2330Z), the formatted and transmitted runs will still be editable. The Verification Editor window does not update to indicate the change in status of the runs from U to F or T. It is possible that users may think they are editing values that the cccVERxxx message recipients will get when they are really not.

Workaround: Close the Verification Editor and reopen it if it has been open over the period of time when the formatting and transmitting of messages occurs (around 1130Z and 2330Z).

• **Problem:** The Last Obs Ceiling and Visibility values are editable for Snow Only and Public Stations. (**DR 5203**)

Stations set up in the AVP as Public and Snow Only have "NA" in the rows for Ceiling and Visibility except the first field, Last Obs. The Last Obs field is editable, but the others in the row are not. For Snow Only stations, these fields are "MSNG". When trying to edit and save these values for Snow Only stations, an error message pops up: "VerScreen::write(): saved failed, status = 2011". Clicking OK and changing the values back to "MSNG" allows the user to continue. For Public stations, the application ingests values for the Last Obs fields. They can be edited as desired. The values are formatted into the cccVERxxx messages sent to NCEP.

Workaround: Edit both the Last Obs fields to "MSNG", and no extra data will appear in the formatted messages.

• **Problem:** The Verification Editor does not check between different parameters for valid observation values. (**DR 5205**)

The Verification Editor allows the user to save combinations of meteorological parameter values that are not allowed in observations. A user can save the following combinations that are not allowed in observations: A definite Ceiling with a Cloud Amount of "CLR" or "SCT", a Wind Spd > 6 Knots with "VRBL" Wind Dir, a Wind Spd > 0 with a Wind Dir "0", 12-Hr Snow > 0 with POP/(in) = "0.00", and Obs6h Wind Spd (greatest in a six hour time window) < Obs Wind Spd.

Workaround: Users should check to make sure the values they are editing are correct.

• **Problem:** Uninitialized CCFMEF variables from IFPS are not set to Missing. (**DR** 10031)

Forecast values from the IFPS digital forecast matrix that have the IFPS special value for MISSING may not be set to the AVP's MSNG value or other valid values when extracted from the DFM cube, processed, and written to the AVP database. For example, IFPS missing Cloud Amounts are incorrectly set to the illegal value of zero.

Workaround: Use the Verification Matrix Editor to enter valid and correct values.

• **Problem:** Verification does not transmit if KBLU is used as one of the verification stations. (**DR 12710**)

When station KBLU is used, the Create_AEV_Message log reports the following: LOG-STATUS: Log file opened on host ds1-tbdw at Tue Jun 3 11:30:48 2003 11:30:48.621 fillin_elements.ecpp PROBLEM: ERROR in function fillin_elements: AEV_Station_Type not found for station_id = 8110. The station_id 8110 is KBLU.

Workaround: Do not use KBLU as one of your verification stations.

1.2 Climate

• **Problem:** Some Climate Report Format selections should not be allowed. (**DR 7004**) In the Report Format GUI, some fields concerning last year's data should not be user-selectable, such as "normals" and "departure from normal".

Workaround: None.

• **Problem:** Resultant wind is not output in the NWWS product when selected. (**DR** 7007)

When all wind elements for the NWR monthly report are selected, the resultant wind is not output in the NWWS product, although it is output to the NWR product.

Workaround: Take the resultant wind value from the NWR product and edit it into the NWWS product if desired.

Problem: The NWWS version of Climate attempts to transmit deleted products. (DR 7011)

If the user creates an NWWS product, but then decides to delete the product using the Climate editor, the product is deleted as expected. However, the program continues to request *transferNWWS.pl* to transmit the product out over the NWWS. Since the product no longer exists, the *transferNWWS.pl* script generates an error message.

Workaround: None. However, since the product no longer exists, no product is transmitted and the *transferNWWS.pl* script just generates an error message. This error occurs only once per deleted product.

• **Problem:** Sky cover is not enhanced with SCP observations. (**DR 7442**)

The sky cover value in the climate products is not enhanced with satellite information.

Therefore, for most ASOS stations, this value represents only the lowest 12,000 feet.

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** The crons that determine when and how the Climate program runs should be separate from *ingest.crontab.ds1*. (**DR 7756**)

Most sites need to change the times of execution of their climate programs from the baseline *ingest.crontab.ds1*. *Ingest.crontab.ds1* is used for standard execution times of programs, but the climate program is user-configurable.

Workaround: Edit the Climate entries directly in *ingest.crontab.ds1* as necessary.

• **Problem:** Missing data in GUIs should be displayed as M. (**DR 7923**) Missing data are stored in the database under various values, such as 9999, 9999.0, -9999, and 99. The stored data should not be changed, but the display of these data in the GUI should be M.

Workaround: None.

• **Problem:** Warning messages from database changes should be improved. (**DR 7925**) The Quality Control Climate Database warning messages need to be improved to provide the users with more informative and useful messages.

Workaround: None.

• **Problem:** Snowfall estimate is output as 0 instead of missing. (**DR 8195**) The snowfall estimate may appear as 0 despite the fact that precip is reported and the maximum temperature is less than 32 F.

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** Eliminate extra record for annual normals. (**DR 8815**)
When the Initialize Climate Database GUI is launched with the "Annual" option, the GUI contains "First" and "Last" buttons. These buttons are useful for "Daily", "Monthly", and "Seasonal" records. However, for "Annual", since there is only one annual record per station, both buttons need not be active.

Workaround: None.

• **Problem:** Some monthly average sunshine data is missing from the F6 product. (**DR** 10682)

The F6 product summarizes the total number of minutes of sunshine, and should give the average number of minutes of sunshine and the average percentage of possible sunshine, but the last two fields are missing from the final product.

Workaround: Edit the final product manually as necessary.

 Problem: Selecting Edit Climate Product on the Linux text workstation causes the NWR Browser and NWWS Review windows to appear on the Linux graphics monitor. (DR 12279)

When Climate is run manually from a Linux graphics monitor, selecting Edit Climate Product (when new appears) on the text workstation causes the NWR Browser and NWWS Review windows to appear on the graphics monitor where the climate program was originally executed. These windows should appear on the text workstation as they did in previous releases.

Workaround: Simply use the NWR Browser and NWWS Review windows on the graphics monitor when they appear there.

• **Problem:** The Initialize Climate GUI does not accept a monthly record snow depth of T. (**DR 12429**)

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** Climate should not allow the rerun of the monthly climate product if new records have been set. (**DR 12551**)

The monthly climate should follow the same paradigm as the daily climate by not allowing the report to be rerun if a new record has been set.

Workaround: Use caution when rerunning the monthly climate product for a month in which a record was set.

• **Problem:** Changes made in the Review Climate Product window are not saved when Send is selected. (**DR 12970**)

Changes are only saved if the Save button is selected prior to sending. In all previous AWIPS Builds, the Send button both saved and sent the NWWS Climate Report.

Workaround: The Review Climate Product GUI has four pushbuttons at the bottom (including "Save" and "Send"), plus two File Menu pulldown items, one of which is "Accept Climate Run". When the climate product is completed for review and editing, the products are written to temporary files in the \$CLIMATE_DIR/tmp directory. If the user edits the product(s) and presses "Save", these temporary files are updated.

However, this is the only button that updates the temporary files with new data. When the user presses either "Send" or "Accept Climate Run", these temporary files are written to the database, and another software component (*transferNWWS.pl*) reads the address field of these newly stored products and "sends" them to the appropriate address. Consequently, if the user edits the data, but does not press "Save" first, the edited changes, which have not been saved, will not be sent. Therefore, when changes are made in the Review Climate Product window, select the Save button before selecting the Send button to make sure the changes are saved.

• **Problem:** When record snowfall is a trace, the output product shows -1. (**DR 13399**) The database value for a trace is -1, but the output product should translate this value to a T instead of reporting -1.

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** When the greatest snow depth is T, the corresponding date is not stored in the database. (**DR 13401**)

When the greatest snow depth for a given month is a trace, *display_climate* writes the daily value to the daily database, but not the corresponding date to the monthly database.

Workaround: Modify the monthly database manually to insert the date, or edit the final product manually as necessary before transmission.

• **Problem:** *Display_climate* shows -1 instead of T for AVG and MAX snowdepth fields. (**DR 13403**)

The GUI which retrieves information from the database to permit the user to edit it displays -1 instead of T for the average snow depth and maximum snow depth fields.

Workaround: None.

1.3 Color Curve/Blinking/Image Combination

• **Problem:** User-created color curve becomes distorted when combining images. (**DR** 1298)

Create a new color curve, one that shades the freezing line on surface temperature for example. If that image is then combined with another image, the newly created curve becomes distorted, i.e., the shaded region that before the combination highlighted the freezing line now shades a different and larger range of temperatures on the part of the combined image. This is due to the 4-bit + 4-bit image combination algorithm.

Workaround: None.

• **Problem:** The color enhancement on a GOES sounder product is infrequently incorrect. (**DR 10782**)

The color enhancement on the GOES sounder product DPI Total Precipitable water is infrequently reversed. The problem always occurs in the lower right hand portion of the image.

Workaround: None.

• **Problem:** The Graphic Color Chooser/Centroid does not work correctly after the color bars are moved in HSB mode. (**DR 10894**)

On the Linux workstation, load a graphic into the large pane and bring up the Color Chooser tool. Select HSB, move any of the Color Bars (Hue, Saturation, or Brightness), and then move the Centroid around. At this point, the user cannot manually move the Centroid into the green area. If the user switches back to RGB mode, the Centroid still cannot be used correctly. This problem only occurs on the Linux workstation.

Workaround: The user can still select any color using the Color Bars.

• **Problem:** Data Scale does not work for combined or multiload products. (**DR 11438**) When using Data Scale from the D2D Options menu, the product selected is displayed on its native scale. For example, data from a non-local radar will display on a map encompassing its range. However, when using Data Scale, if the user selects a combined or multiload product, such as Z/V, 4-panel satellite or radar, or a model family, the scale adaptation does not work.

Workaround: None.

• **Problem:** The display pane can crash when displaying the 0.5 Reflectivity Mosaic with SPC Watches. (**DR 13865**)

When a user loads a 0.5 Reflectivity Mosaic with SPC Watches with looping on, and then right clicks on the mouse and holds it to cycle through the menu items, eventually the display pane IGC process crashes and the pane restarts. This takes time to happen and seems to occur more quickly the faster you cycle through the menu items.

Workaround: Cycle through the menu items slowly in this situation, or bring up the menu items with looping turned off.

1.4 Display

• **Problem:** The window focus does not always follow the cursor. (**DR 13708**) On the 3-headed Linux workstations, when moving the mouse from screen to screen, the window focus sometimes does not follow the cursor. That is, the window underneath the cursor is not always automatically activated after the mouse has moved from one screen to another.

Workaround: Always maintain a "slice" of root window between adjacent screens. That way the mouse will know which screen it is on before it moves over a window application in that screen. Alternatively, click mouse button one on a window header to make it active.

1.5 Local Analysis and Prediction System (LAPS)

• **Problem:** LAPS infrequently does not run for an hour due to an *lga* crash. (**DR 6385**) The LAPS *lga* executable may crash when it cannot access RUC data. However, most of the time when *lga* cannot use RUC data, there is no crash and *lga* just tries to use Eta data.

Workaround: None. This problem occurs rarely and LAPS works the next hour.

Problem: LAPS relocalization does not indicate if it succeeded or failed. (DR 6407)
 There is no indication when the LAPS relocalization is done. The user receives no notification if it succeeded or failed.

Workaround: Look at the logs in /data/fxa_local/laps/log to see if it was successful.

• **Problem:** The confirmation message when relocalizing using the LAPS Tool GUI is not clear. (**DR 6524**)

The LAPS Tool GUI has a Confirmation window that appears when the user selects Localize LAPS. The window looks like it is intended to tell the user not to run the localization when the LAPS cron is running. The window says: "Procedure takes ten minutes. Consider that it is hh:mm and LAPS usually runs at :20 after the hour." The box does not indicate when LAPS ends or tell the user to check on AS2 to see if it is done. It could show specific times that the localization should not be run.

Workaround: LAPS localization should not be run during the LAPS cron run, which is usually between 20 and 30 minutes after the hour.

• **Problem:** The LAPS tool for displaying data used for current analysis does not work for a short time after 0Z. (**DR 7774**)

The LAPS tool for displaying data used for current analysis indicates that the files that it needs to view are not found for a short period of time after 0Z. If the tool GUI is opened shortly after 0Z, the data that were used in the previous run cannot be viewed until LAPS runs again around 0020Z.

Workaround: View the logs manually through a Telnet window, or wait until LAPS is finished to view the 0020Z LAPS run logs.

• **Problem:** LAPS cannot handle two template files. (**DR 9562**)

If there are two template files in the LAPS directory, for example a template file and a template.orig file resulting from site changes, LAPS fails to run successfully.

Workaround: Move the template original file to another directory for safe keeping.

• **Problem:** Some LAPS logs are written to the wrong directory. (**DR 12965**) The laps_sfc.ver.<hhmm> and sfcqc.log.<hhmm> logs are written to the wrong directory. They are written to /data/fxa/laps/log/qc and /data/fxa/laps/log, respectively, but should be written to /data/logs/fxa/display/<date>/laps.

Workaround: View the logs in their current locations as indicated above.

1.6 Local Storm Report (LSR)

• **Problem:** There are inconsistencies with LSR report products displayed on D2D. (**DR** 10605)

When a user creates an LSR from within the LSR GUI and saves or transmits the report, a netCDF file is created for display on D2D. There are three LSR entries on the menu on D2D: Office, Local, and Region. When the netCDF file is created, the Local and Region green times update, but the Office green time does not. When the user loads the Local or Region product, nothing is displayed, but if the user selects Office, the report just created is displayed.

Workaround: View the LSR products from your site by using the Office menu item, but be aware that the green time will not update.

• **Problem:** The cities list for LSR is not valid for marine reports. (**DR 10834**) There are a few options within the LSR GUI where a report can be received from a source that does not have a location in the LSRcities.txt file. These sources include Buoy, Coast Guard, and Ship. There are no buoy stations within the Location list that can be selected, but a location is needed before the event can be saved. This results in a ship calling in a storm report and a location over land being needed to save the event. Either a lat/lon option should be added, or buoy markers should be included in LSRcities.txt. This problem also affects how events are displayed on D2D.

Workaround: None.

• **Problem:** Very close spotter locations may cause the LSR GUI to crash. (**DR 11893**) On the HP workstation, when two spotter locations are very close together (i.e., the lat/lon pairs are very similar) in the spotters.dat file, the LSR GUI may not run successfully. This problem does not occur on the Linux workstation.

Workaround: Use the Linux workstation to launch the LSR GUI if this problem occurs. However, most sites will probably not encounter this problem.

• **Problem:** There is a need for manual PIL configuration capability. (**DR 13615**) The field has expressed an interest in being able to manually provide the XXX, CCC, and wmoVar parts of the LSR PIL. Currently, the LSR GUI obtains these from a WWA file, but the PIL pieces can be different for the LSR product (than for the other WWA products).

Workaround: None.

1.7 Looping/Sampling/Swapping Panes/Zooming

• **Problem:** Straight map lines sometimes disappear when zoomed. (**DR 4415**) If the user zooms in sufficiently (usually max on WFO scale), map lines may disappear. This seems to happen when neither end of a line segment is on the display.

Workaround: The map line can be made to reappear by roaming the display or zooming back out.

- **Problem:** Two skew-T sampling problems. (**DR 8196**)
 - 1) If a user has lat/lon sampling on, then displays a skew-T chart, the sample includes lat/lon information appropriate for the scale that was previously displayed. It cannot be turned off, since there is no lat/lon sampling button in the pop-up (appropriately).
 - 2) The theta/theta-e readout in skew-T samples includes a degree sign in front of the K. There should not be a degree sign there.

Workaround: Turn lat/lon sampling off before displaying a skew-T.

• **Problem:** Swapping 4-panels in 3-pane layout produces incorrect display times. (**DR** 8226)

In 3-pane layout, when swapping the 4-panel VIL Density procedure (0.5 reflectivity, Comp Ref., VIL, ET) from large pane to small pane, the displayed times in the small pane all default to the time noted in the upper left panel (in this case, that for the 0.5 reflectivity). Thus, for all but a few seconds of each volume scan, the times noted for the volumetric images in the top right (CR) and lower two bottom panels (VIL and ET) are incorrect. It appears that the displayed time, for a 4-panel display, defaults to the time stamp of that image in the upper left-hand panel. The products in the other panels do not update until the upper left panel updates.

Workaround: None.

• **Problem:** Swapping panes eliminates overlays more than 7 frames from the end of the loop. (**DR 12761**)

The following is an example of this problem: Load multiple (>7) frames of satellite data into the main pane. Step back greater than 7 frames, choose Inventory load mode, and load METARs to create an overlay. Swap into small pane (if looping is on, notice default

loop is most recent 7 frames no matter how many were originally loaded). Swap the data back into main pane to restore the original conditions. Then, step back to the frame where the METARs were overlaid over the satellite, and the overlay is no longer present. This does not happen when the overlay is less than 7 frames back, possibly because that information is still stored by the loop in the small pane. This can happen when other data types are overlaid as well.

Workaround: Avoid swapping overlays such as this into the small pane if possible. This problem does not occur when overlaying products over the entire loop.

1.8 Map Features/Legends

• **Problem:** Large panes do not load correctly the first time D2D is launched after login. (**DR 7409**)

When logging into a workstation, then launching D2D, the map background in the large pane does not load correctly. The large pane loads with a little 2 x 3 inch CONUS map background in the top left corner, and the rest of the pane is black. The large pane stays this way until the mouse is run over the miniature map background or the menu bar. At that point, the large pane fills up with several of these miniature map backgrounds, then quickly switches to the correct map configuration.

Workaround: None, but no operational impact. The problem disappears as soon as the mouse is run over the pane. In addition, the problem only happens when D2D is launched the first time after logging into a workstation.

1.9 NCEP/Redbook Graphics

• **Problem:** Some NCEP Model Graphics products have errors. (**DR 707**)

Bad MRF MeanRH and AVN 850-500 Thickness data cause the UKMO, ECMWF, and S-blend 6-10 500 height products to be centered over Africa when they should appear over the pole.

Workaround: None. OST is working with NCEP on the Redbook Graphics issues.

Problem: Some NCEP model products have different times on product dates, product legends, and green times. (DR 2479)
 Some NCEP model products have product times (in the upper left corner), product

legends, and green times that all differ from one another. The products are: From the Model Graphics cascading menu in the Upper Air menu, MRF 0-5 Wave 500 hgt, 120h UKMO 500 hgt, 120h ECMWF 500 hgt, and 6-10 day 500mb Height. From the National Centers models cascading menu in the NCEP/Hydro menu, NGM Moist Conv.

Workaround: None.

• **Problem:** Several Redbook Graphics products have incorrect date time groups on the WMO headers. (**DR 4142**)

Several Redbook Graphics (RBGs) date time groups (DTG) on their product's WMO Header are not correct. The DTG time should be the cycle time (also called basis time) for the forecast or analysis. For example, a 12 hr forecast of a product with a valid time of 09/00Z will have a cycle of 081200 (08/12Z). The AWIPS CP assumes the product WMO header date time group (TTAAii CCCC DDHHMM) will always be the cycle time and uses this information to "time stamp" the product which is key to time matching the product with other data types. The WMO DTG is created at the product generation source point which is typically at NCEP/NCO. An inventory of RBGs with the DTG problem has been accomplished and forwarded to NCEP. The methodology for checking to see if the WMO header of the RBG is the cycle time is to compare the AFOS label valid time with the AWIPS valid time label. Another way is to cat the file and compare the AWIPS DTG on the RBG file name with what appears in the file dump resulting from the cat.

Workaround: None.

• **Problem:** Text is curved on some Redbook Graphics products. (**DR 9614**) On some Redbook Graphics products, some of the text displayed for the products is curved on the D2D display. This makes the text more difficult to read. Some products that have this problem include the 3-7, 6-10, and 8-14 Day Heat Index Fcst, West Atlantic Fonts/Press Fcst, and North Atlantic Surface Analysis.

Workaround: None.

• **Problem:** Text is misplaced on some Redbook Graphics products. (**DR 9661**) The placement of text strings in SPC Redbook Graphics products on AWIPS is incorrect. A lot of text is being misplaced in the upper left hand corner of the display. This misplacement of text can result in some users misinterpreting SPC products.

Workaround: None. Use care when viewing Redbook Graphics products that have the text misplaced on them.

Problem: The probabilistic heat index forecast products are purged too quickly. (DR 12978)

These products (WMO ID: PTNK98KWNC) total nine charts, which are saved with time stamps of one minute after the other for each chart. However, purge is set to keep only two versions of these products, and thus the other seven are purged soon after being stored.

Workaround: Manually modify the purge parameters to retain more versions of this product than two.

1.10 NMAP

• **Problem:** The Radar selection menu barely fits on the screen. (**DR 12114**) When loading radar data, the user is presented with subcategories of data submenus that get added to the bottom of the selection panel. In order to select the accept button at the bottom of the panel, the user must drag the selection panel to the very top of the screen. This makes the very top edge of the accept button available for selection.

Workaround: The accept button is barely viewable, but is selectable, when the panel is moved to the very top of the screen.

1.11 Procedures/History List

• **Problem:** The top bundle in the history list cannot be altered. (**DR 6916**)

Workaround: Clear the screen and the top bundle becomes the second bundle, and it can then be altered.

1.12 Product Maker

• **Problem:** The "*mb" option in Product Maker does not work properly. (**DR 2436**) When loading a product in the Product Maker using "*mb", only two frames display. Neither frame has a pressure label. The second has a time stamp of -251868HR Thu 00Z 01-Jan-70.

Workaround: None.

• **Problem:** The "<" and ">" operators have problems with contoured fields. (**DR 3453**) The Product Maker has a problem displaying the following field, and other fields with the < operator: (Height[ETA,,,500mb,*]) < (5460). The field is displayed such that the contours closest to 5460 are broken up. An image displayed for this field appears blocky and discontinuous around 5460.

Workaround: None.

• **Problem:** Product Maker is not able to calculate values of parameters at specific latitudes and longitudes. (**DR 4669**)

For example, a user could enter an equation of Temp,Eta, 90,40,500,12 to calculate the temperature at 500mb at 90W, 40N for the 12hr Eta forecast. When loaded, the word "Loaded" appears in the Status/Value line, but no value is returned, and nothing appears

on the D2D.

Workaround: Some of these values may be obtained by loading the product as an image in the Volume Browser and sampling. Then the value sampled may be manually put into the Product Maker for additional calculations.

• **Problem:** Product Maker has problems with satellite imagery. (**DR 8162**) The Product Maker displays satellite information (not the actual image) incorrectly. For example, the IR_window image is displayed with its correct color curve, but the color curve legend is in counts from 0-255 instead of in degrees C. When the image is sampled, those same "counts" are returned, as if it were a visible image. Also, the visible imagery legend (and sample) goes from -50 to +300, instead of 0-255.

Workaround: None.

• **Problem:** AVN and MRF still appear as sources in the Product Maker. (**DR 13530**) The AVN and MRF still appear as sources in the Product Maker. These products have been renamed to GFS. However, this does not prevent the loading of the products via the Product Maker.

Workaround: None needed.

1.13 Radar

• **Problem:** Some D2D radar windows report abnormal exit when closed. (**DRs 5972**, **8946**, **10468**)

When some D2D radar windows, such as RMR, the OTR, Alert Request, or RPS windows, are opened, worked with, and then closed, sometimes a message appears in the D2D status bar or as a Red Banner Message stating that the window exited abnormally. There appear to be no adverse affects from this message though.

Workaround: None. There is no operational impact.

• **Problem:** Confusing exit message in Alert Area Request window. (**DR 8197**) When exiting the Alert Area Request window, the user may get a Warning! Dialog window saying that the user has not saved the edits. This window includes a button labeled 'Press "Exit" to exit before exiting'.

Workaround: None needed. Simply press the button to exit.

• **Problem:** The All Tilts product sometimes does not update properly. (**DR 8287**) The All Tilts radar product sometimes updates with the wrong data. For example, if the 1.5 SRM is displayed, sometimes the .5 SRM comes in as an update.

Workaround: Reload the product to display the current version. The product also will auto-update with the correct version with the next volume scan.

• **Problem:** RCS and VCS products update all panes when loaded. (**DR 10595**)

Both products are only available via OTR. When they are loaded, all RCS or VCS panes are updated with the latest product. So, for example, if three windows are loaded with an RCS product all at different times, and the user does a OTR and gets the latest RCS, when it is available all three panes are updated.

Workaround: None.

• **Problem:** Radar menus update inconsistently when products are not available. (**DR** 11014)

If an elevation is requested and is not available, the next lowest elevation is provided, which is by design. However, sometimes both the requested elevation and the elevation provided are updated with a current time on the menu. The product is stored twice under both elevations, but is the same product. This happens most consistently with the DZ product (8-bit Reflectivity).

Workaround: None. Be aware that the radar menus may sometimes be inconsistent in cases such as these.

• **Problem:** The Radar Mosaic product does not display properly. (**DR 11494**) When the .5 refl radar mosaic product is zoomed, the display around the site's dedicated radar shows a 'doughnut' of missing data in the 1-2 nm range and data in the 0-1 nm range.

Workaround: Use the non-mosaic version of this product from the site's dedicated radar. The 'doughnut' problem does not occur on this product.

- **Problem:** Retention of ULR products with different parameters within the database is not possible. (**DR 11975**)
 - 1) If multiple requests are issued via the OTR and routine requests, only the last is retained in the database. If the user enters more than one ULR product into the RPS list, only the last entry is retained. AWIPS should allow retention of products with different parameters (top and bottom of the ULR) within the database, and should have the Inventory expanded so that the user is aware of the differences in the products.
 - 2) This non-retention of the parameter information prevents looping of individual parameter sets. Instead, the loop contains all of the products retained within the database.

Workaround: None.

• **Problem:** Range rings sometimes display incorrect values. (**DR 12261**)
Sometimes radar range rings display incorrect values. This has been observed most often when range rings are displayed over a radar product for the first time in a D2D session. The range rings display a large magnitude negative number for km above ground level.

Workaround: Clear the display pane and reload the radar product and range rings. This time the range rings will display correctly.

• **Problem:** The MRU/SRM all elevation request may limit the ORPG list without the user realizing it. (**DR 12499**)

The MRU and SRM all elevation request is seen as a single line in the RPS list by the *RadarServer*, but the product actually contains more than nine different products. This could mean that as AWIPS radar ingest capabilities approach the limits imposed by the ORPG (about 90 products currently), an RPS list that on the AWIPS side appears to be within the ORPG limits may in reality be too long on the ORPG side. This problem becomes more obvious as the user adds more 'All product' requests.

Workaround: Use care to ensure that this problem is taken into account when creating RPS lists containing products with multiple elevations, so that the maximum number of products allowed is not exceeded.

• **Problem:** The All Tilts product legend is too long. (**DR 13381**)
When the user loads several of the All Tilts products on D2D for any radar, the product legend in the lower left of the screen becomes too long and the beginning of the product legend name is cut off.

Workaround: Resize the current window to see the full product name.

• **Problem:** A misleading error message can be produced by the One-Time Request application. (**DR 13495**)

If the user tries to request the 256-level, 1-km res V product from the OTR (an invalid product), two dialog boxes appear. The first reports that the 256-level V product must use res 0.25. When that error is dismissed, the second dialog box appears, erroneously reporting that an error occurred while trying to send the OTR, when it is actually just reacting to the same invalid product specification noted in the first error dialog box. Even if the message were corrected to report an invalid product spec, since the user has been presented with an error dialog already, this second one should be suppressed.

Workaround: Simply acknowledge the second error dialog box to dismiss it.

• **Problem:** Data dropouts (missing images) can occur in auto-updating radar loops with 4 and 8-bit reflectivity data. (**DR 13787**)

In a 12 frame loop, it has been observed that, on average, two to three random images in the loop will be missing after about 30 minutes of letting new data auto-update. When the loop is reloaded after clearing the pane, all data are then present. The longer the loop runs, the more frames will become missing. This has been observed with 4 and 8-bit reflectivity in standalone or in combination with velocity.

Workaround: Clear the pane and then reload the radar loop to restore the missing frames of data.

1.14 Satellite

• **Problem:** Persistent unsynchronized GOES imagery in four-panel satellite view. (**DR** 13000)

The four-panel satellite images are typically synchronized in time. However, sometimes (often several times per week), it is not possible to produce a time-matched set due to the nightly suspension of visible data, eclipses, switches between routine mode and RSO and back, and sporadic missing imagery. These events cause the imagery from one or more channels to be missing, while imagery from other channels is available. In these cases, D-2D often displays "Not available" for the missing sector, or sometimes picks another near-in-time (though not exactly time matched) image, with the result being one or two out-of-sync images. Temporary out-of-sync images in themselves are not a serious problem, but often even after such temporary periods of missing imagery are over (e.g., when complete data coverage has resumed), D-2D often continues to display out-of-sync data products until some other event triggers a resynchronization. For example, some event might trigger an incomplete set of satellite imagery at 6Z. By 7Z, complete sets of imagery are restored, but, later in the day, as a user loops through the image sequence between, say, 6 and 9Z, unsynchronized imagery displays for every loop sequence, even for periods when a complete set of imagery is available. The correct behavior should be that out-of-sync imagery is either not displayed at all, or only displayed for the time periods when an incomplete set is available. Once complete time-synchronized data are available, they should be displayed.

Workaround: None.

1.15 Surface

• **Problem:** Plots of 3 hour pressure change from the METARs do not match the change in pressure in METAR plots. (**DR 3173**)

There is a problem with the treatment of pressure change on the METAR station plot. The pressure change typically shows a rise or drop in the last three hours, but the pressure change variables are not matching the pressure variables. Furthermore, when the actual pressure change is large, there seem to be greater errors in the pressure change depiction. For small actual pressure changes, the pressure change depiction is correct or just slightly off.

Workaround: None.

• **Problem:** Russian Upper Air data are not processed by AWIPS. (**DR 4943**)

Workaround: None.

• **Problem:** There is a QPF scale display problem. (**DR 6173**)

Currently, the RFC QPF products are only available at the Regional Scale or below. The problem is that most of the sites in the list are outside that scale, but are still selectable. As a result, the user may select a product and it will load, but the user will not be able to see the data. The menu should grey out stations not accessible at a particular scale. Also the RFC QPF should be displayable at the CONUS scale or below.

Workaround: None.

• **Problem:** The FFG Mosaic product produces errors in the *IGC_Process* log. (**DR 9167**) When loading FFG Mosaics from the Hydro section of the NCEP/Hydro menu, the *IGC_Process* log reports errors. There is one RFC with old data, and there are errors reported for each RFC that does not have data as old as the old data. It does not appear that this prevents any valid data from loading. Here is a sample of the errors seen: IGC_Process 9582 999808650.703837 20:37:30.703 BUG: Error opening file: /data/fxa/img/SBN/netCDF/HRAP/FFG/CBRFC/3hr/20010725_1200.multi IGC_Process 9582 999808650.718507 20:37:30.718 BUG: Error opening file: /data/fxa/img/SBN/netCDF/HRAP/FFG/LMRFC/3hr/20010725_1200.multi IGC_Process 9582 999808650.720652 20:37:30.720 BUG: Error opening file: /data/fxa/img/SBN/netCDF/HRAP/FFG/MARFC/3hr/20010725_1200.multi IGC_Process 9582 999808650.723665 20:37:30.723 BUG: Error opening file: /data/fxa/img/SBN/netCDF/HRAP/FFG/MBRFC/3hr/20010725_1200.multi

Workaround: None, but no operational impact.

• **Problem:** Menus for Synoptic data must be manually created at CONUS sites. (**DR** 11063)

CONUS sites who turn on the *SynopticDecoder* must manually create the menu items for these data.

Workaround: Create a file in /data/fxa/customFiles called <site>-preserveMenuItems.txt (or append to the existing file if already present). Edit in entries for the menus for the Synoptic data (refer to the file on an OCONUS site for guidance). On each workstation, run a localization for tables (/awips/fxa/data/localization/scripts/mainScript.csh f - tables). Restart D2D and verify that the new menu items now exist.

• **Problem:** Western Pacific hurricane reports are improperly decoded. (**DR 11476**) The hurricane tracks product reads the TCP products for Western Pacific storms. However, the value for sustained wind is incorrect on the resultant plots. Instead of extracting the sustained wind from the TCPWPx product, the NE quadrant radius of 34kt winds is what is plotted.

Workaround: View the TCPWPx product in a text window to determine the correct value for the sustained wind.

• **Problem:** Moving maritime reports plot incorrectly when the wind group is missing. (**DR 11877**)

When the wind group is missing from a maritime report, the report is plotted incorrectly on D2D. Instead of not plotting the wind barb, AWIPS takes the temperature group and interprets it as the wind group, and the temperature is then not plotted. Subsequent data in the report (dewpoint, SLP, etc) are plotted correctly.

Workaround: None.

• **Problem:** The lightning plot sometimes displays incorrectly during periods of intermittent data. (**DR 12063**)

The following scenario describes the problem. Lightning data were received during the 1200 time frame, but not during the 1100 hour or the 1300 hour. The current time is 1350 UTC. Requesting the one-hour lightning plot displays 1200 lightning in the legend, but displays nothing in the main pane (the empty 1100 time). Since there is no lightning so far for the 1300 hour, there is no netCDF file for it. The display generation seems to interpret a one hour request as "display the hour previous to the most recent existing netCDF file", which is from 1200 in this case, so it displays the empty 1100 data file but places 1200 in the legend, but not with the data that exists from the 1200 hour.

Workaround: Load shorter time-projection plots, such as 15 minute lightning. However, be aware that the problem could exist for those plots as well if the data are sufficiently intermittent.

• **Problem:** The heat indices displayed on the D2D product are sometimes off by a degree at some locations on the display. (**DR 12260**)

On any given display of the product, a few locations may show this error. The error is not specific to any particular location or region.

Workaround: None, but the majority of locations on any display will not suffer from this problem. When in doubt, consult the Hourly Weather Roundup product for the correct value.

• **Problem:** The current Drought/Wetness and Crop Moisture Index products on D2D are not available. (**DR 12809**)
The products that display are from 2002.

Workaround: None.

• **Problem:** On Linux, MOS sampled on D2D has extra characters. (**DR 12818**)

When a MOS plot is loaded on D2D from the Forecast data menu in the NCEP/Hydro menu, it can be sampled. The text of the MOS plot appears. However, on the Linux workstation, at the end of the lines of the products, there are boxes. Most lines have two boxes. Some lines have one box.

Workaround: No data are lost, so there is minimal operational impact. Simply ignore the extra box characters.

• **Problem:** METARs with no metadata all plot at 1W, 1S (-1, -1). **(DR 13084)** All METAR observations that go through the *MetarDecoder* process get stored in the netCDF files, even those for which we have no metadata (these are tagged in the log as "not in dictionary"). When such a station is stored, its latitude and longitude are set to -1, and the display plots them at that location. Few sites see this, since most do not have a scale on which this location appears, but for those who do, it can be misleading.

Workaround: Ignore all METARs plotted at 1W, 1S (-1, -1).

• **Problem:** The sampling of local data plots raw data does not word wrap correctly. (**DR** 13195)

When sampling the raw data string on local data station plots, the string often gets split into two or more lines. In that case, the first character that should lead off the second line gets truncated.

Workaround: Try zooming and/or roaming the display to allow more room for the sampled text on the screen.

• **Problem:** Fixed buoys that have been moved are not plotted correctly on D2D. (**DR** 13586)

The Buoy Decoder does not decode and read the Latitude/Longitude section of the Fixed Buoy Report. Thus, if a fixed buoy is moved for some reason, it will continue to be plotted at the old location, but with the new location's data. This could cause confusion when doing marine surface analyses.

Workaround: None.

• **Problem:** The Snow Water Equivalent image is displayed about 1 degree too far east. (**DR 13676**)

The Snow Water Equivalent image product produced by the North Central RFC (site MSR) displays incorrectly on D2D. The entire image is shifted about 1 degree to the east.

Workaround: None.

1.16 System for Convection Analysis and Nowcasting (SCAN) and Flash Flood Monitoring Program (FFMP)

• **Problem:** The FFMP Basin Table can lag the D2D display. (**DR 10642**) If FFMP is not loaded as the first product in the D2D IGC pane, it is possible for the basin table to fall behind by one volume scan. For example, this happens when the first product loaded is DHR. The DHR image in the D2D will update at about the same time that the *FFMP processor* gets triggered and begins its cycle. If the DHR was loaded first (with FFMP loaded after), the interactive depictable associated to the extension (basin table) will try to refresh itself when the DHR image gets updated, but the data is not there yet to use since the *FFMP processor* is not finished with its cycle yet (and has not issued the notification for the FFMP data).

Workaround: Be sure FFMP is loaded first in the D2D pane when displaying it along with other products.

• **Problem:** There are problems with the SCAN New Event Warning/Indication box. (**DR** 12627)

In OB2, the SCAN New Event Warning/Indication box was made to pop up to the left of the main D2D display pane, rather than in the middle of the screen as had been the case previously. However, there are still problems with the message box. The popup window is now larger, and thus takes up more screen space. The window cannot be moved or minimized, and now covers up two of the small D2D panes. In addition, on the Linux workstation, any additional windows that are up always go behind the SCAN window when moved over it.

Workaround: Acknowledge the SCAN message window to close it. Additionally, users can change how often the message window appears. Set the threshold alarm time to a very large number to make the window pop up only rarely (or not at all). Set the time to a smaller number to make it pop up more often than the default (30 minutes). Execute the following steps to change the threshold alarm time:

- 1. Start up a SCAN cell table
- 2. Select the Configuration button
- 3. Select Alarm Time Setup
- 4. Enter numbers (in minutes) for Cell, Meso, and TVS
- 5. Select OK

Note, these instructions are also available in the popup window under the Configure button.

1.17 System on AWIPS for Forecasting and Evaluation of Seas and Lakes (SAFESEAS)

• **Problem:** Running SAFESEAS with debug turned on may cause the application to crash. (**DR 12954**)

Workaround: Leave debug turned off for SAFESEAS unless it is necessary to have it on for troubleshooting.

• **Problem:** Allowing highlighting of thresholds lines in the configure thresholds windows can be confusing. (**DR 13335**)

In the Configure Display Thresholds and Configure Monitor Thresholds windows, users may highlight zones. Users may highlight lines of values for meteorological parameters also for the zone or for other zones. Changing the values of the meteorological parameters affects only the meteorological parameter values for the highlighted zones. This can be confusing if a user highlights one line for the zone and chooses a different line for meteorological parameters because the meteorological parameters highlighted are not changed. The GUI should allow the user to highlight only the same station and parameters.

Workaround: Use care when highlighting items in the Configure Display Thresholds and Configure Monitor Thresholds windows.

1.18 Text Alarms/Warnings

• **Problem:** The *textNotificationServer* sometimes loses contact with a text workstation. (**DR 6489**)

On rare occasions, the alarm/alert and update obs functions on a particular text workstation stop working. Alarm/alerts and update obs are not received even though the products are coming in. Once this happens, that particular text workstation will no longer receive alarm/alert and update obs notifications until it is restarted. The Monitoring Controller window continues to receive alarms on the same text workstation while this problem is occurring. This problem also prevents WarnGen messages from reaching the text workstation. When "Create Text" is selected in the WarnGen window, the product is sent to WWA, but never gets to the text workstation. The WarnGen text window does not pop up, and the product cannot be called up using WRKWG# from a text window.

Workaround: Log out and back into the affected text workstation. The problem does not affect the other text workstations' alarm/alert, update obs, or WarnGen functions.

1.19 Text Product

• **Problem:** Duplicate TAFs are being stored. (**DR 7587**)

Some TAF products are being stored in the database more than once, because they have different headers. Some of these are individual TAFs that also appear in a collective. Some are contained in several collectives that have different WMO headers. The

CollDBDecoder processes all of these, and because the headers are different, the decoder stores all of them. The duplicate filter does not work because the products are, in fact, different.

Workaround: None.

• **Problem:** Multiple versions of a text product are stored if different products under the same WMO ID are repeated. (**DR 10643**)

At SEW, multiple versions of SEACGRNMW are being stored. There are about five different products that are coming in under the SXUS40 header. Sometimes the set of five distinct products repeats. To the site, this appears to be duplicate product storage, but the duplicate text filter is not catching it because it only looks at the most recent version stored under the AFOS PIL.

Workaround: None.

• **Problem:** Infrequent duplicate text storage can still occur. (**DR 12745**) Infrequently, the storage of locally produced text products in the textDB is delayed long enough that the SBN version of the product arrives back at the site before local storage occurs. This can result in the same product being stored to the database twice. It is most noticeable for warnings, because as a result, the warning is stored twice in the textDB and duplicate NOAA Weather Radio alarms sound.

Workaround: None, but this should occur even more rarely due to other DR fixes for duplicate product storage.

1.20 Text Workstation

• **Problem:** Help function is incorrect in Text Browser for international origin. (**DR** 3886)

There are a couple of discrepancies with International sites. In the node section, the help function gives Wisconsin Rapids, WI for ISW. This is correct for the US KISW, but incorrect for the International site. The other discrepancy is choosing ICO as the node and CO1 under MTR. Using the help function on this, the user gets Rivers in Colorado. However, ICO is the International site Columbia.

Workaround: None. The data can be retrieved by typing in the AFOS PILs in the AFOS Cmd command line for these products.

• **Problem:** Site will receive a requested product regardless of version if product WMO ID is unknown. (**DR 4137**)

With the Request/Reply function, if a site requests a product that cannot be found in the WMO ID table, the request will go out with XXX for the WMO ID and CCCC, and the site will receive the product back from the remote site even if it is the same version of the

product as that already in the requesting site's database. The request is still sent, but the remote site will satisfy the request even if it has no newer versions. If the remote site sends the same version back, the requesting site will write it to the database as if it were a newer version, resulting in duplicate copies of the product in the database. The requesting site should instead receive a message back from the remote site stating no newer versions of the product were found.

Workaround: None, but minimal operational impact.

• **Problem:** The Change All button on the text workstation spell checker does not work if there are numbers. (**DR 6388**)

The Change All function on the text workstation spell checker does not work if there are numbers attached to (no white-space between) the word that is being corrected.

Workaround: Use the Change button instead.

• **Problem:** Request/Reply returns the same product more than once. (**DR 6408**) If a site requests and receives a product from another site and then requests the same product again from the same site, the product is sent to the requesting site again and is stored in the text database. The result is duplicate products in the text database.

Workaround: None.

• **Problem:** D2D-launched text window spell checker does not work on Linux. (**DR 9793**)

The spell check feature in a text window launched from the D2D on a Linux workstation does not work. When the spell checker is accessed, a error message appears saying, "Error: error writing "file43":broken pipe."

Workaround: Use a text window on the HP workstation if the spell checker is needed.

• **Problem:** The Text Script Commands Netscape Help is not available. (**DR 10125**) The Scripts Help feature on the Text window is not available, because the /html directory that contains the help information is missing. Choosing Help launches Netscape, but a message is then displayed stating:

"Netscape is unable to find the file or directory named /awips/fxa/data/html/"

Workaround: None.

• **Problem:** The text window still looks at siteCommission.txt before transmitting every product. (**DR 11807**)

The text window still looks at the file

/data/fxa/workFiles/wanMsgHandling/siteCommission.txt before transmitting every product, to see if the site is in commissioned mode or not. This seems like unnecessary

overhead at this point. If users want a text workstation or site to not transmit real products to sites, they can disable that capability using the Text Message Intercept feature.

Workaround: None, but little operational impact.

• **Problem:** Highlighted text is virtually unreadable in the Linux text workstation text windows. (**DR 12694**)

When text is highlighted in a text window on the Linux text workstation, the background is a whitish-yellow color and the text is white, making the text virtually unreadable.

Workaround: Use the text window on the Linux graphics screen or on the HP workstation when it is necessary to highlight text.

• **Problem:** National text products may require the CCC to be displayed at RFCs. (**DR** 13563)

Normally, national text products (e.g., SAW, SEL, STADTS, FRH) can be displayed in a text window by simply typing NNNXXX (e.g., STADTS). This is no longer true on the test RFC system and may also be a problem at other RFCs. The user must now type the full AFOS PIL.

Workaround: Type the full AFOS PIL CCCNNNXXX (e.g., STOSTADTS) to display the product.

• **Problem:** The Text Workstation is slower on Linux than on HP. (**DR 13589**) The Xterms are slower now that they are connected to Linux versus when they were connected to HP. This is probably do to the fact that with the use of KDE, the Xterms are using more memory than they used to.

Workaround: None. This will probably be taken care of with the Xterm replacement.

• **Problem:** The textdemo "start" script should not source *readenv.csh*. (**DR 13605**) The textdemo "start" script should not source *-fxa/readenv.csh*. This is unnecessary since *readenv.csh* is already sourced via textdemo's .cshrc upon login. More importantly, this multiple sourcing of *readenv.csh* and *environs.csh* can lead to globbing problems ("Word too long" errors due to extra-large variable replacements). When this happens, the "start" script fails when it tries to source *readenv.csh*, resulting in the *textWS.tcl* and *hmMonitor.tcl* scripts not executing.

Workaround: Delete the environs.* files in /tmp and re-login to the text workstation.

• **Problem:** The hmMonitor fails to close when the Text Workstation closes. (**DR 13886**) When the user exits the Text Workstation, the hmMonitor does not close and stays up. So, when the user selects Start TextWS again, the Text Workstation starts, but it also

starts a second hmMonitor. As a result there are multiple hmMonitors running on the X-Term. This started occurring when the X-Terms were connected to the Linux Workstations.

Workaround: Explicitly close the hmMonitor window before exiting the Text Workstation.

1.21 Tools

• **Problem:** "Forecast Time" vs. "Inventory Time". (**DR 1611**)
When using Inventory load mode, in the Select Forecast and Inventory dialog box, the forecast times and inventory times match only for the first inventory time listed.

Workaround: The forecast time the user loads can be determined manually from the Inventory time and the hour forecast (HR) section of the Forecast time section.

• **Problem:** Time setting problems. (**DR 12344**)

Three problems are evident with the D2D time-setting mechanism.

- 1. When a user selects Set time on D2D, specifies a time in the past, deselects Freeze time at this position, and selects OK, the clock sets back as it should. However, the display does not pay attention to the time on the clock, instead loading current data. (The behavior is correct if Freeze time at this position is left in its default selected state.)
- 2. If a user sets the time back, then brings up the Set time dialog to adjust the time, the current real time is displayed in the dialog. Instead, the Set time radio button should be selected and the previously set displaced time should be displayed.
- 3. If Freeze time is selected, the format of the clock on the display changes from hh:mm Z dd-mmm-yy to dd-mm-yy hh:mm Z. The same format should be used in all cases, letting the white on black or yellow on black color be the cue that the time displayed is not the current time.

Workaround: None.

• **Problem:** The Units Conversion Calculator returns invalid results when using large values. (**DR 13532**)

Inputting large values into the Units Conversion Calculator often produces invalid results. For example, 12345678 km converts to -53922388m, 1234567 days converts to -707593600 seconds, and 1234567 Nmi converts to -2008549212 m.

Workaround: Use caution when inputting large values into the Units Conversion Calculator.

1.22 Upper Air

• **Problem:** Profiler horizontal and vertical variance data are missing. (**DR 3513**) Profiler horizontal and vertical variance fields are not included as part of the normal data stream that AWIPS receives. These data will have to be included in the normal AWIPS data stream before they can be viewable on AWIPS.

Workaround: None.

• **Problem:** Label magnification problem with hodograph. (**DR 5170**) When working with the Interactive Skew-T and Hodograph, if the user zooms in over the hodograph and toggles Helicity/Storm Inflow on from the Skew-T controls window, the values/labels do not reduce when the user zooms back out.

Workaround: Once zoomed back out, toggle on and off the Helicity/Storm Inflow to force it to reduce magnification.

Problem: The Interactive Skew-T calculates energy incorrectly when there is a mid-tropospheric inversion. (DR 6226)
 The Interactive Skew-T program only accounts for one Level of Free Convection (LFC).
 If there happens to be a mid-tropospheric inversion, which will create a second area of

negative energy and a second LFC, the second area is ignored.

Workaround: Edit the sounding to eliminate the second inversion.

• **Problem:** The MRF Mean RH product in the Upper Air menu has spurious lines displayed and the model times in the legend are incorrect. (**DR 7143**)

Workaround: None.

• **Problem:** Cannot add a new vertex to the Hodograph. (**DR 8324**)

A new vertex cannot be added to the Hodograph in Interactive Skew-T mode. When mouse button three is clicked over the hodograph line, a menu pops up with "Add Vertex". If Add Vertex is selected, a new vertex appears, but as soon as the mouse button is released, it disappears.

Workaround: None.

• **Problem:** The profiler perspective product displays slightly differently in the small pane. (**DR 10329**)

The profiler perspective product plots winds on a staff with 10 height ticks (including the surface) in the large pane. When swapped into a small pane, the staff has 11 ticks, until the height of the pane is changed, at which point it then returns to 10.

Workaround: Ensure that the display shows 10 height ticks by viewing this product only in the large pane, or in a small pane that has been resized.

• **Problem:** The KMXR sounding is not displayed above 300 mb. (**DR 11367**) Sounding data for KMXR do not display for levels above 300 mb, even though the data are being decoded and stored.

Workaround: View the raw sounding data from the corresponding text products on the text workstation.

• **Problem:** Displaying the interactive skew-t for winds only output (e.g. VWP winds, profiler) does not work. (**DR 12941**)

Missing values are displayed with the computed parameters related to wind data (helicity, storm motion, wind shear). Making changes and/or adding points to the hodograph also does not change any of the parameters.

Workaround: None.

• **Problem:** The Interactive Skew-T Skew-T Controls window does not reset itself upon clear. (**DR 13626**)

In an Interactive Skew-T session, the user can use the Skew-T Controls window to change lifting methods, add/change points to the skew-t or hodograph, etc. By default, the window comes up with the Surface lifting method invoked and no changes entered in any parameter boxes. When the IST session is cleared, and a new one is started on a different skew-T in the same D2D session, the Skew-T Controls window comes up with the values and changes made in the last IST session, even though the displayed IST is based on the default settings, such as the Surface lifting method. The Skew-T Controls window should reset itself back to default when a new IST session is started to avoid confusing the user.

Workaround: Set the lifting method back to Surface manually and select Lift Parcel, and reset the Add'l Information section if necessary, before any work is done in the new IST session. Alternatively, use a different D2D for the next IST session.

1.23 Volume Browser/Grid Products

• **Problem:** Differences noted between N-AWIPS and AWIPS QPF fields. (**DR 658**) A difference was noted in the AVN model QPF fields when comparing WFO-A displays with the N-AWIPS display. The discrepancy involved the 60-72 hour projections. Essentially, when displaying the 12Z run of the AVN model, the WFO-A system indicated that close to 2 inches of rain would be received in the DCA area while N-AWIPS indicated all rain would pass to the south.

Workaround: None. COMET is performing an analysis of AWIPS vs. N-AWIPS displays. This is a long-term effort.

• **Problem:** Eta Model Precipitation error. (**DR 1092**)
The Eta Precipitation field differs from the current PCGRIDDS product in that AWIPS shows a .01 contour where PCGRIDDS shows 0.

Workaround: None. COMET is performing an analysis of AWIPS versus other system displays. This is a long-term effort.

• **Problem:** NCEP grid and coding problems for Eta model. (**DR 1629**)

The resultant data from the Eta ingest has the maximum and minimum temperatures off by twelve hours. This also results in a steady temperature trace. The data is sent from NCEP in this format.

Workaround: The NWS Office of Science and Technology (OST) is working with NCEP on a number of data issues, including this one.

• Problem: The small map in the Volume Browser Time Series products does not change to accommodate new point locations. (DR 2398)
If a product is loaded, for example, for the west area of the CONUS, and then a second product is loaded for the east area of CONUS, the small reference map does not change to include the location of the second product.

Workaround: None.

• **Problem:** Some NHEM scale AVN data are missing past 48 hours. (**DR 7118**) The logs show data that come in at the 6-hour increments (including 54, 66, 80, 92, etc), but on D2D they are only viewable every 12 hours after 54 hours.

Workaround: None. At CONUS sites, the CONUS AVN data are available. However, the OCONUS sites do not get that CONUS data.

• **Problem:** Wave Watch III is missing coastal data. (**DR 8494**)

The display of the NOAA Wave Watch III (GWW) global model wave height forecast data in D2D is missing grid values for the coastal area of the grid domain out to approximately 100km offshore in some places. This problem of missing data is also apparent in the GFESuite display of the global Wave Watch III model forecasts. This is due to the interpolation of the data from course grids to higher spatial resolution grids on AWIPS.

Workaround: None.

• **Problem:** GWW color editor changes get overwritten by auto-update. (**DR 10032**)

Display wave height fields as an image for the GWW model. Using the color editor, block fill a portion of the data (e.g., make 4-6 meters black). After the display autoupdates to the next model run, either the color fill values change, or the color fill changes get reset to default.

Workaround: Perform the color fill again on the new model image.

- **Problem:** Two units problems with the Diff function in the Volume Browser. (**DR** 10785)
 - 1) The result of the Diff function on surface temperature and dewpoint (either plan view or time series) should be the same as dewpoint depression. However, the units do not come out right.
 - 2) If the user does a Diff of variable vs height of vorticity and divergence, the scale is not labeled in a useful way. If the user overlays this Diff on those undiffed fields, the result is just a straight line.

Workaround: None. Be wary of the results of the Diff function in these situations.

• **Problem:** A Tcl error is displayed when selecting Show Detailed Inventory. (**DR** 11436)

When using time series in the Volume Browser, when the user right clicks to "Show Detailed Inventory", a Tcl error occurs. The following error is displayed: Error: called :show inventory" with too many arguments.

Workaround: None.

• **Problem:** The regional wave model grids for the Western North Atlantic are shifted slightly to the north. (**DR 11740**)

The regional wave model grids for the Western North Atlantic that are sent over the SBN on AWIPS grid 238 have an error with the Latitude location. This results in the grids being displayed on D2D shifted one-half degree to the north of their actual location.

Workaround: None. The grids need to be fixed at generation before transmission over the SBN.

• **Problem:** The AVN boundary layer and surface winds are the same on CONUS and lower scales. (**DR 12371**)

When selecting the AVN surface wind fields, only the boundary layer winds display on the CONUS scale and below.

Workaround: Use a different model to view these wind fields.

• **Problem:** The Sea Ice Cover product has no units. (**DR 13531**)

The Sea Ice Cover product available via the Volume Browser the products has no units on it.

Workaround: None.

• **Problem:** A Time Series with different scales displays incorrectly. (**DR 13696**) When a Time Series with different scales (such as temperature and height) is first loaded, the top Time Series uses the top of half of the screen, and the bottom Time Series uses all of the screen. The top Time Series should be in the top half of the screen, and the bottom Time Series should be in the bottom half of the screen.

Workaround: Zoom in and then back out over one of the Time Series, and they will correct themselves. The top Time Series will then be in the top half of the screen, and the bottom Time Series will be in the bottom half of the screen.

1.24 Warning Generation (WarnGen)

• Problem: WarnGen logs to the previous day if a new session is loaded after the previous session overlaps breaklog. (DR 7486)
If a WarnGen session is loaded continuously in a pane before, during, and after the breaklog, any new WarnGen sessions launched in that same pane are logged to the previous day's logs.

Workaround: None, but no operational impact.

Problem: WarnGen sometimes formats times with redundant time zones. (DR 11957)
 Some sites that have part of their CWA using daylight time and part not get redundant time zone descriptions from WarnGen during standard time such as:
 * UNTIL 535 PM EST (535 PM EST)

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** The pathcast option is in the wrong place in the WarnGen GUI for tornado warning. (**DR 12529**)

When attempting to create a tornado warning in WarnGen, the "BASIS FOR WARNING" section states to choose 1 from the list of options. The "pathcast" phrase appears in this section along with "Doppler Radar indicated..." and all the other possibilities. The "pathcast" phrase should be moved to another section since it is valid to select this with another "BASIS FOR WARNING" option.

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** A zombie *textdb* process is created when the WarnGen QC function displays a message on the screen. (**DR 12676**)

When the WarnGen QC finds an error in a created text product, a message window is displayed to the user on the text workstation indicating the nature of the problem. The *textdb* process used to create this message window then goes zombie. However, there appear to be no adverse affects to the system from this problem other than that.

Workaround: None should be necessary, as full functionality is retained despite this problem. If necessary, reboot the workstation to clear the zombie process(es).

2.0 INTERACTIVE FORECAST PREPARATION SYSTEM (IFPS)/WATCH WARNING ADVISORY (WWA)

• **Problem:** The wrong time zone is sometimes used in the WWA text. (**DR 9622**) When a site has zones/counties in different time zones, the time identifier used is always that of the site's time zone. If the zones/counties formatted are in a different time zone, that time zone should be used in all time formatting. If the zones/counties formatted are in both, then both times should be printed, with the second in parentheses (). Dateline time should also be accounted for.

Workaround: Edit the product manually as necessary before transmission.

• **Problem:** WWA crashes if launched after GFE on a workstation. (**DR 10471**) If WWA is launched on a workstation that already has GFE running, WWA fails to start up and crashes. However, if WWA is started first, and then GFE is started, both applications do run concurrently. WWA can even be exited and restarted successfully with GFE still running, as long as WWA was the first of the two applications to be launched.

Workaround: If both WWA and GFE need to be run on the same workstation, be sure that WWA is launched first.

• **Problem:** Variable substitutions do not work in the WWA template files. (**DR 12029**) The code framework for variable substitutions in WarnGen does not work in WWA. Specifically, the variable substitutions do not work in WWA, and the optional bullets do not get expanded.

Workaround: None.

• **Problem:** The Headline Editor window displays too small and has to be resized. (**DR** 12185)

The Headline Editor window pops-up at a very small size the first time it is displayed in a WWA session. The window should pop-up at a default reasonable size.

Workaround: Resize the window to a larger size manually.

• **Problem:** When NEW is selected on the WWA Monitor, the WWA Composer appears with the previous product's attributes. (**DRs 12266, 12721**)

When NEW is selected from the WWA Monitor, the Composer opens with the previously edited product's attributes. If a different Watch/Warning/Advisory/Statement is selected, the attributes refresh correctly, but if the user creates another product using the same Watch/Warning/Advisory/Statement, the old attributes continue to show in the Composer (including the last product's creation time). Selecting Restart in the Composer, after making changes, also causes the Composer to revert to the last transmitted product's attributes. This can cause user confusion.

Workaround: Close WWA and re-open it to clear the problem (reset WWA).

Problem: Expiration messages are not generated for the NWR. (DR 12339)
 Expiration messages are not being generated for the NWR. These messages are supposed to be generated automatically when a WWA product is about to or has expired to inform NWR listeners that the WWA is no longer in effect.

Workaround: Use the NWREditor to create and transmit the Expiration message as necessary.

• **Problem:** The Linux desktop menu does not have an entry to launch the WWA admin interface. (**DR 12428**)

Workaround: Launch the interface from the command line by running: /awips/adapt/ifps/bin/linux/WWAAdmin.sh.

• **Problem:** WWA often fails to launch on the Linux text workstation due to a memory shortage. (**DR 12437**)

Workaround: Run WWA on the Linux text workstation only if nothing else is running on it, or run WWA on a graphics screen of the Linux workstation.

• **Problem:** WWA will not start if the IFPS_INGEST_SITE and/or FXA_LOCAL_SITE variables do not match the IFPS_SITE variable. (**DR 13116**)

Workaround: Contact the NCF, and ask them to contact MDL to assist you. However, this should be an infrequent problem.

Problem: Using the monitor delete key causes trouble in upgrade/downgrade. (DR 13392)

When generating a WWA using the upgrade/downgrade/replace process, canceling back from the transmit editor, then using the delete key in the monitor to reset the unissued "green" segment(s), the pending hazard is deleted from the monitor as it should be, but

the valid watch is also deleted from the Geo-Viewer and the generated text contains the watch split into independent segments for associated counties.

Workaround: None.

• **Problem:** The WOU products represented in the new WOU GUI are not automatically ordered. (**DR 13663**)

This list needs to be ordered for the users with the latest WOU at the top when the GUI is open.

Workaround: None.

• **Problem:** WCN database and template file changes are needed. (**DR 13664**) The WCN new template file names defined in the WWA char database do not match the actual names of the NWR template files. Also, the WCN template files need to change from zone based to county based in the template itself.

Workaround: Users can manually edit the WWA and NWR templates in the WWA Admin GUI.

• **Problem:** Spell check enhancements are needed. (**DR 13665**)

After spell check is used in the xmit editor, the text pointer remains at the end of the document. It needs to be reset to the beginning after every use, or when the xmit editor is opened. Also, when spell checking a document and the end of the document is reached, the user should be prompted "End of document reached, start from beginning?". Provide a yes/no box. If yes move pointer to the top of the document and start spell checking, if no move pointer to the top of the document for the next session and exit spell check.

Workaround: The spell checker can still be used despite lacking these enhancements.

• **Problem:** The WWAAdmin Hazard panel does not indicate change made before save. (**DR 13666**)

Widgets on the hazard panel do not change a flag indicating that a change was made to the Widget. This is done in the configuration (flat file) component of the application. Therefore, when the user exits the application, there is no way to know if the user made changes to the hazard panel. In short, the configuration component remembers that the user made changes and asks the user if he would like to save those changes, while the hazard component does not. Instead, a save is done every time regardless of any changes.

Workaround: None needed, as a save is performed automatically every time.

• **Problem:** Monitor refresh can slow down when many products are in use. (**DR 13667**)

Whenever many products appear in the Monitor, and many rows of data are in the status table, WWA experiences an extreme slowdown of the Monitor refresh. Local testing with 150 rows of data in the status table caused 30 seconds to pass during refresh, while during an actual event LWX, BOX, and GYX experienced 1 - 4 minute lapses while the Monitor was refreshing given similar amounts of data.

Workaround: None.

• **Problem:** Products cannot be issued out to seven days. (**DR 13747**)

The new NWS Directives allow for outlook-type products, such as Frost/Freeze Outlook, to be issued out to seven days in advance of the actual event. However, in the WWA Composer, the maximum duration is 99 hours, or approximately 4 days.

Workaround: Edit products manually as necessary before transmission.

• **Problem:** The ProdExp time is not updating in the Composer. (**DR 13748**) The ProdExp field is not updating when you followup/clear a hazard and the Composer comes up. It remains the issuance time plus the offset time, rather than the current time plus the offset time.

Workaround: Edit products manually as necessary before transmission.

3.0 HYDROLOGY

3.1 HydroBase

- **Problem:** Two problems with the check feature in HydroBase's *shefdecoder* restart window. (**DR 13624**)
 - 1. The information shown in the window is from the last time Check was run.
 - 2. The time shown for the start of the *shefdecoder* is in local time. Most process times are shown in GMT.

Workaround: 1. Run Check twice to get the desired information. 2. The user can mentally convert the time himself.

3.2 HydroMap/Multisensor Precipitation Estimate (MPE)

• **Problem:** The legacy Damcat help button does not work. (**DR 10008**)

The help files are not displayed when the help button in the legacy Damcat is selected.

The help files are in /awips/hydroapps/whfs/local/data/app/damcat, but Damcat is looking for them in /help.

Workaround: The help files can be viewed directly using a Telnet window in the /awips/hydroapps/whfs/local/data/app/damcat directory.

• **Problem:** It is not possible to print color screen prints of hmap_mpe on the Linux workstation. (**DR 12685**)

The *print_image* script, which is used when doing screen prints of hmap_mpe, does not support the optional use of color printing on the Linux workstation.

Workaround: Use the HP workstation to print such screen prints.

• **Problem:** HMAP/MPE sometimes crashes when time lapse is started. (**DR 12843**) The crash most often occurs when a time lapse is started, then ended, and a new time lapse is started for more hours than the original time lapse, or when a time lapse for a large number of hours (e.g., 24) is started.

Workaround: Exit and restart HMAP/MPE before starting a time lapse for more hours than the one that was just ended, and limit all time lapses to less than 24 hours if possible.

3.3 National Weather Service River Forecast System (NWSRFS)

• **Problem:** NWSRFS IFP does not display colors as designed when alert request window is up. (**DR 4240**)

When running NWSRFS IFP on a monitor on which an Alert Request window is displayed, the NWSRFS IFP window sometimes does not display the colors as designed. This makes some data in the application unreadable for the user. This was noted in the Forecast Group Topology and IFP Plot windows, and may be a problem in other windows too.

Workaround: This is a color-contention problem. Close the alert window and restart NWSRFS IFP. Minimal operational impact.

• **Problem:** IFP infrequently crashes when loading new forecast groups. (**DR 11142**)

Workaround: Relaunch IFP and the forecast groups should load successfully the second time.

3.4 SiteSpecific

• **Problem:** On Linux, SiteSpecific does not start from HydroMap when HydroMap is started from D2D. (**DR 10665**)

If the user selects HydroView from the Hydro Apps submenu in the NCEP/Hydro menu of D2D, and then starts SiteSpecific from the LiveData menu of HydroMap, SiteSpecific does not start.

Workaround: On Linux, start SiteSpecific from the Gnome AWIPS menu or by command line. Alternatively, use SiteSpecific on the HP workstation.

• **Problem:** SiteSpecific does not start from the D2D NCEP/Hydro menu on Linux. (**DR** 11401)

SiteSpecific does not start from the Hydro Apps submenu in the NCEP/Hydro menu on D2D on the Linux workstation. The D2D indicates that SiteSpecific terminated.

Workaround: Start SiteSpecific from the AWIPS menu on the Linux workstation, or use SiteSpecific on the HP workstation.

3.5 WHFS

• **Problem:** Damcat error checking message meanings are not self-evident to users. (**DR** 12629)

The Damcat error checking returns messages to the user, but the messages are not easily understood. Some examples include "dam_elev = -nan" and "down_distance_from_dam or down mann oc not defined".

Workaround: Consult the OHD documentation for assistance if necessary.

• **Problem:** TimeSeries does not read from the procvalue table. (**DR 13623**)
TimeSeries shows Duration, Type Source, Physical Element combinations for values that the *shefdecoder* puts in the procvalue table, but the data can not be viewed on TimeSeries.

Workaround: None

4.0 LOCAL DATA ACQUISITION AND DISSEMINATION (LDAD)

4.1 BBS Interface

• **Problem:** BBS download requires both UNIX account and LdadScheduler user. (**DR** 2470)

Workaround: Ensure that a UNIX account for BBS has a matching LdadScheduler user setup with a protocol selected in the protocol selection area. If a mismatch exists, the error referencing /ldad/bin/sz permissions will be displayed to the external user attempting to download data.

Problem: Xmodem and Ymodem BBS download adds extraneous characters. (DR 3605)

While using the LDAD BBS X and Y modem protocols, extraneous characters are added to the downloaded files. The extra characters are added at the end of the file.

Workaround: Use Kermit or Zmodem protocols for download.

Problem: Problems occur during downloads using Zmodem protocol in LDAD BBS.
 (DR 4089)

When using the Zmodem protocol to download in the LDAD BBS, the product requested is downloaded from the LDAD server as well as other products that are in the BBS menu. The product that is requested gets downloaded first, then the cursor goes to the next product listed in the menu and downloads that product. This process repeats multiple times.

Workaround: None. There is no operational impact.

• **Problem:** Xmodem receive does not work in the BBS. (**DR 11869**) Within the BBS, downloading a file to the local computer does not work using Xmodem. An error message is received stating "Error limit exceeded".

Workaround: Use any other type of transfer, such as Kermit, Ymodem, or Zmodem.

4.2 Emergency Manager Decision Support (EMDS - Web Dissemination)

• **Problem:** Files are reported as missing when EMDS is launched from a browser. (**DR** 7099)

When EMDS is launched from a browser, it requests files that do not exist on the LS1 web server. The LS1 fasttrack error log reports:

can't find /data/ldad/emwww/htdocs/localConfig/Graphic mnu (No such file or directo

can't find /data/ldad/emwww/htdocs/localConfig/Graphic.mnu (No such file or directory) can't find /data/ldad/emwww/htdocs/localConfig/Probe.mnu (No such file or directory) can't find /data/ldad/emwww/htdocs/localConfig/Scroll.mnu (No such file or directory) can't find /data/ldad/emwww/htdocs/localConfig/Text.mnu (No such file or directory) can't find /data/ldad/www/htdocs/icons/grytxtr5.jpg (No such file or directory) These files are not in the specified location on LS1.

Workaround: None, but no operational impact. EMDS still runs successfully from a browser despite these errors.

• **Problem:** The *hmIngest* process intermittently fails to process obs data. (**DRs 7270**, 10554)

Two or three hours each day, on average, the *hmIngest* process fails to successfully process the hourly METAR netCDF file due to EOFExceptions or

NullPointerExceptions. Thus, on these hours, no graphical observation data is available to the user.

Workaround: Use the text pane to view the text versions of the METARs or to refer to the SWR products.

• **Problem:** Adding a new menu item in the configurator sometimes gives the wrong color and parent. (**DR 7370**)

When a user adds a new menu item in the configurator, sometimes the menu item is given the wrong color and parent. The menu item is off by a line or more when viewed in the menu.

Workaround: This is an infrequent problem. If the menu item is hard to read or does not respond, use the configurator to delete and recreate it.

• **Problem:** The *LocalizeWWW.pl* script does not clean up /tmp/stationFiles after running. (**DR 8092**)

Running *LocalizeWWW.pl* creates a /tmp/stationFiles directory on LS1 that it never removes. This causes an error message to appear the next time the script is run.

Workaround: Remove the directory manually before running *LocalizeWWW.pl* again if desired. However, the error message has no impact on the success of the script.

• **Problem:** The *PostConfigure.pl* script has an rcp error. (**DR 8094**)
As part of its operation, *PostConfigure.pl* tries to copy a file onto the DS from the LS, but fails, stating "rcp: /awips/ldad/data/: No such file or directory".

Workaround: None. However, this does not seem to cause any problems, so ignore the error message when it occurs a line before "Finished: Remotely modifying the Graphic.mnu and pollForData.conf files."

• **Problem:** The EMDS application cannot be placed in the Add/Remove menu during installation. (**DR 8819**)

During the EMDS install on a PC, an error message appears stating 'Unable to create an entry for this application in the Control Panel Add/Remove property list. You need administrator privileges to do this.' The Add/Remove list is a Windows list that enables users to easily remove installed applications.

Workaround: To remove EMDS from the PC, remove the directory C:\Program Files\EMDS and all its subdirectories, and delete any desktop icons for the application.

• **Problem:** Switching between Probe methods back to the Draw Area Probe method crashes the display pane. (**DR 8901, 10397**)

There are several different methods by which data can be probed in EMDS. Once a probe session has begun, the user can freely switch from one probe method to another within the same probe session, with the exception of Draw Area to Probe. The user can use Draw Area to Probe successfully if it is the first method selected during a probe session. However, within the same probe session, if the user chooses a different probe method first, and then chooses Draw Area, or uses Draw Area first, switches to another method, and then back to Draw Area, the graphics pane being used for the Probe crashes. The pane goes completely black and loses all of its displayed data and menu items.

Workaround: Select the Clear button to restart the crashed pane.

• Problem: Adding new parameters to a probe list is not always successful. (DR 8902) While using probe, the user can remove or add items to the list of parameters being probed (e.g., remove temperature or add wind). Sometimes, when a parameter is added to the list, there is a lag until it fully becomes part of the list. Normally, an added parameter takes effect on the next move within a probe session (e.g. choose a different county to probe). The parameter is added to the list with its respective values. However, if a particular parameter is added to the list for the first time during an EMDS session, and a time series graph is being displayed in the Probe window, a new line for the parameter is added to the list, but the name and values all say N/A. The name and values do not fill in until the NEXT probe move is made. The data is there though, as you can graph a time series of the N/A data, and actual data does graph, although the name of the data is N/A.

Workaround: Choose another county/zone/etc to probe, and the N/As will fill in with the name and values of the parameter.

• **Problem:** Accumulation of numerous product versions may prevent product display in the text pane. (**DR 9049**)

As new versions of a product are received by EMDS, they are appended to the java file for access via the text pane of the EMDS GUI. If enough product versions are appended to a file, the overall product becomes too large to display in the text pane. In these cases, the java console window indicates the product has been loaded, and the menu choice becomes checked, but the text pane remains blank. If there are only a small number of versions of a particular product, or if there are several versions but each individual product is small, the product does display in the text pane.

Workaround: The EMDS site administrator can delete the file for a particular text product in the /data/ldad/public/javadata directory on LS1, and allow it to repopulate as new versions of the product come in. This makes the product displayable for a while, but it is possible that the overall file will again become too large to display as products continue to append.

• **Problem:** Newly arrived product versions are not always displayable in the text pane. (**DR 9050**)

Normally, when a new version of a text product is received by EMDS, it is appended to the java file and is then displayable in the text pane. However, currently this only works for watch/warning products. With all other text products (e.g., observations, statements, forecasts), new versions of the products are received and processed, but are not displayable in the text pane during the current GUI session. Users are only able to display the latest versions of these products that had already been processed before the GUI session was started.

Workaround: To view newer versions of text products that have been received since the current GUI session was started, exit the GUI and restart it. At that point, all recently received product versions will be displayable, but subsequent versions that are received during this new GUI session will not be displayable until the GUI is again exited and restarted.

• **Problem:** The observed wind barb parameter is not displayable on the graphics pane. (**DR 9056**)

When attempting to load Wind Barb from the Observations -> metar menu of the graphics pane, the following error occurs in the java console window: "Could not fetch parm from server. Either gray text error in MenuDyna or Incompatible file format data/vobs-metar-WindVector-national-0103080720...dat = null" The product does not display in the graphics pane.

Workaround: Users can get wind information from the metar obs and hourly weather roundup products in the text pane.

• **Problem:** Clearing a probe area on the graphics pane by toggling the menu item also toggles the map background. (**DR 9057**)

Many products can be cleared from the graphics pane by selecting the menu item again to toggle the product off. Probe areas that have been outlined on the graphics pane can be cleared in such a manner. However, when the probe action menu item is selected to toggle off the probe area, the map background is also toggled off, leaving a display with no background. This seems to happen most often when the counties map background is displayed, which is the default map background.

Workaround: The map background can be easily toggled back on by selecting the appropriate map background from the Geography menu.

• **Problem:** Replacing displayed images with ones that have not yet been displayed causes a traceback. (**DR 9069**)

An image displayed in the graphics pane can be replaced with another image by selecting the new image from the menu. If it is the first time in the current EMDS GUI session

that the new image has been loaded, the java console window reports tracebacks as follows:

Exception occurred during event dispatching: java.lang.NullPointerException
This occurs especially if any of the animation tool bar buttons have been selected, such as looping. In addition to the tracebacks, the animation function stops, and often the cursor becomes a paintbrush painting the screen with the new image as it is moved about the screen.

Workaround: Select another tool bar button and the image will load and display successfully. No other negative effects have been seen. Once the product is loaded once, the problem no longer occurs for that product if it is loaded again during the current session.

Problem: MenuConfigurator reports an error on startup. (DR 9084)
 When the MenuConfigurator is started, in the java console window, the following error is reported:

MenuDyna.java 258 ERROR: IOException = java.io.IOException: Cannot find URL Cont

ext=http://140.188.2.141/localizations/BOX/wkspace and spec=Xtensibl.mnu This is because the file is actually Xtensibl.frm. This does not seem to cause any problems with editing Text menus in the configurator, but it may cause problems when editing and creating graphics products and map backgrounds.

Workaround: None.

• **Problem:** Newer NWS sites are not in map background and may not be configured. (**DR 9085**)

The newer NWS AWIPS sites that were added to the deployment, namely Key West, Huntsville, and sites in Maine and Indiana, are not included in the map background NWS Forecast Offices. They may also therefore not be set up as configurable sites. If that is the case, web dissemination will not be localizable to these sites.

Workaround: Manually edit localization files from other sites to tailor them to the new sites.

• **Problem:** Text Scroller bars sometimes crash. (**DR 9086**)
Infrequently, when under moderate usage, the text scroller bars crash. The java console window reports NullPointerException errors and tracebacks. From this point on, no watch/warning headers will scroll across the text bars until the EMDS GUI is logged out and restarted. However, the products DO appear in the text and graphics panes, and the Beep sound DOES still beep, so all that is missing is the visible header scroll.

Workaround: Exit and restart the EMDS GUI.

• **Problem:** The *hmIngest* process does not process leftover files in /data/ldad/hmIngest. (**DR 9174**)

If *hmIngest* fails to process files in /ldad/data/hmIngest for any reason, when proper processing resumes, *hmIngest* does not process those leftover files. Instead it merely resumes processing with new products as they come in. So, unlike a decoder, which cleans out its input directory, the products that *hmIngest* missed the first time are not retrieved, and thus are lost. The products are eventually purged.

Workaround: None.

• **Problem:** The list of files to synch is blank if too many files are involved. (**DR 9175**) During a synchronization, EMDS checks to see which files on the user's PC need to be synched with those on the LS. Once this list of files is determined, the user is given the list of files to be synched and asked if he wants to synch. If the number of files to be synched is too large, no list of files is presented to the user. The window tells the user the following files are to be synched, but then does not list any files. This could cause confusion, and possibly cause the user to choose not to synch when he should.

Workaround: If the synch window appears, asking if you want to synch, but does not list any files to be synched, choose yes to perform the synch.

• **Problem:** The scroll bar in the menu configurator GUI does not scroll. (**DR 9176**) In the menu configurator GUI, the user can expand menus in the headers to see the subitems. However, if the menus are expanded down such that they exceed the length of the window, the scroll bar does not allow you to scroll down to see the other menus.

Workaround: Contract some of the menus in order to see the lower ones.

• **Problem:** Sampled text does not wrap at edge of pane. (**DR 9232**)
When sampling in the graphics pane, the sampled text adjusts and displays to the right or left of the cursor as necessary to be displayed in the pane. However, if the text is still too long, it displays to the edge of the pane and then gets cut off. The rest of the text does not wrap, and thus is not displayable.

Workaround: None. The extent of the impact caused by this problem will depend on the monitor size and screen resolution of each user's monitor.

• **Problem:** Latest text products are not always available upon EMDS GUI start-up. (**DR** 9233)

When the EMDS GUI is brought up, most text products that can be displayed in the text pane display the most recent version(s) of the products. Sometimes, however, one of the products does not display the most recent version, but instead displays an older version.

Workaround: Exit and restart the EMDS GUI.

• **Problem:** Running EMDS as a java applet does not work with Netscape 6.X. (**DR** 9653)

Running EMDS as a java applet through a web browser does not work if run from any version of Netscape browser 6.

Workaround: Use Netscape version 4.7 or older or any version of Internet Explorer to bring up the java applet form of EMDS.

• **Problem:** The wind direction angle definition is different between GFE and EMDS for LAPS. (**DR 10029**)

The GFE uses a wind direction angle defined clockwise from the positive Y - axis, but the EMDS uses a wind direction defined counter-clockwise from the positive X - axis. As a result, the displayed wind directions for the same data will be different.

Workaround: Use the GFE wind directions. They are correct.

• **Problem:** The link for HP developers is incorrect. (**DR 11226**)
On the Download Page of the EMDS web page, there is a link to go to HP for more information on HP-UX. However, this link has been changed by HP. The new link is http://www.hp.com/go/developers.

Workaround: Use the new link to view information for HP developers.

• **Problem:** Synchronization from within the EMDS GUI does not work. (**DR 11353**) There are basically three ways to synchronize the EMDS application: 1) use the synchexe application, 2) synch as the first step to bringing up the EMDS GUI, or 3) synch from within the EMDS GUI using the Synchronize Application menu item from the File menu of a graphics pane. This third method does not work. When it is chosen, the cursor momentarily goes to an hourglass, but then nothing happens. The java console window reports the following:

MenuDyna.java 538 ERROR: IOException on Bean instantiate: PAckage/Class Name = l dadapp.util.syncBean

Workaround: Use either of the first two options noted above to synch the application.

• **Problem:** First time loading the Wind Vector contour product produces a java traceback. (**DR 11354**)

When the Local scale Wind Vector contour product is displayed on a graphics pane for the first time in an EMDS session, a java traceback scrolls in the java console window. However, the product does load successfully on the screen, and all subsequent displays of this product within the same EMDS session load without any java traceback. No other ill effects have been noticed from this error occurring.

Workaround: None, but no operational impact.

• **Problem:** The default webSiteName.txt file sometimes lists the wrong URL. (**DR** 11458)

The default website address that is presented to the user to connect to is sometimes wrong, especially when using ls1-<site>:8080. In this case, the URL displayed to the user has the full IP address except for the :8080/ at the end of it.

Workaround: Add the missing characters when prompted by the EMDS program for the URL to which to connect.

Problem: Watch/Warning products sometimes scroll two headers per product. (DR 12734, formerly DR 9025)

When a watch/warning product is received by EMDS, it scrolls the header of the product across the appropriate scroll bar to alert the user as follows:

Tornado Warning 0: WWUS51 KBOX 081230

However, sometimes, in addition to the legitimate header, a second header scrolls for the product just issued, as follows:

Tornado Warning 1:....

This bogus header has no expiration time associated with it, so it continues to scroll for days after the real warning has expired (when a product expires, it stops scrolling).

Workaround: None. However, the real header is always scrolled in addition to the bogus header.

• **Problem:** The *hmingest* process intermittently fails to process data due to a file missing. (**DR 13474**)

Infrequently, *hmingest* fails to successfully process the SFORRSXXX text product. The error states that the file is not found (see below). This problem only occurs 4-6 times a day out of numerous successful times processing the product, but it does prevent the user from being able to display that version of the product.

 $:Nov13-13:12:17GMT[IngestShell:IngestShell] > EVENT: \ run(): ERROR: , \\ currentThread().hashCode() = 251236959hmlib.common.FileFault: A file expected to exist does not exist:$

/data/ldad/hmIngest/nwstext-report-local.SFORRSSTO.200311131320.txt.1068729320

Workaround: View other similar hydro products in the GUI.

• **Problem:** The *hmingest* process sometimes fails to process text products due to a cache failed error. (**DR 13476**)

hmingest sometimes fails to process a text product successfully due to a cache failed error (see below). The log goes on to say that the product is successfully processed, but the statement that should precede that saying the cache finished successfully is not present. Thus, the product fails to be stored, and is not displayable by the user on the EMDS GUI.

This happens as many as two dozen or more times a day, involving a variety of different product types (MTR, TWB, CLI, etc.).

Nov13-01:34:32GMT[TextFactorMill:TextFactorMill]> EVENT: TextFactorMill FactorMill.run(): , currentThread().hashCode() = 251238020, cache started Nov13-01:34:32GMT[TextFactorMill:TextFactorMill]> EVENT: TextFactorMill TextFactorMill.cache(): , currentThread().hashCode() = 251238020, cache failed, java.lang.ArrayIndexOutOfBoundsException: 4 >= 4

Workaround: The only workaround for the external user would be to look up the products on the NWS web site, if the product in question is made available to the public normally, which won't always be the case depending on the product type.

Problem: Attempting to display the RRS product causes EMDS to hang. (DR 13477) When the user attempts to display the RRS product on the Text pane of the EMDS GUI, the cursor goes into an hourglass and the application hangs. No menu items are accessible from that point on. The java console Dos window shows a java error Out of Memory.

Workaround: There is no workaround; this product is not displayable. The resolution is to restart the EMDS application GUI.

• **Problem:** The ifps grids fail to be processed by *hmingest*. (**DR 13606**)

The ifps grids that can be sent from AWIPS to EMDS for display on the EMDS GUI fail to be processed by *hmingest*. See error below. The result is that the user is unable to display any forecast grids on the EMDS GUI.

Dec11-17:06:25GMT[IngestShell:IngestHandler]> EVENT:

Workaround: None.

• **Problem:** The Probe function does not work for some parameters. (**DR 13608**) The Probe function used in EMDS to interrogate data no longer works for some meteorological parameters. The probe data table shows N/A for these data, and the java console window displays the following error:

ERROR: Could not fetch Parm from server. Either gray text error in MenuDyna or Incompatible file format.

Workaround: None.

4.3 Fax

• **Problem:** The *sendFax.tcl* script should be removed from /awips/fxa/ldad/bin. (**DR** 13672)

The *sendFax.tcl* script now lives in /awips/fxa/bin, and thus should be removed from /awips/fxa/ldad/bin in the baseline.

Workaround: None needed. The fax functionality operates correctly despite the script being present in both locations.

4.4 Ingest and Display

Problem: LDAD surface_qc plots do not show failed QC correctly. (DRs 10625, 11079)

Instead, once the plot is loaded, toggling on the bad QC menu causes all data to be displayed red, and toggling on the good QC menu causes all QC data to be displayed green.

Workaround: None.

• **Problem:** Products are dropped when multiple products are in an input buffer. (**DR** 11136)

The *suaReceiver* expects there to be only one product present in a single input buffer. However, in reality, it is possible to have more than one product present in a single input buffer. In this case, the *suaReceiver* processes the first product, but then drops all subsequent products in the buffer and does not process them.

Workaround: None.

4.5 Scheduler

• **Problem:** The LDAD Scheduler does not support interrogation of password-protected Sutron gauges. (**DR 8777**)

Sutron gauges have the capacity to require a username and password in order to be interrogated. The LDAD Scheduler currently does not have the capability to interrogate such a gauge.

Workaround: None, but such gauges should be rare.

4.6 Triggers

• **Problem:** The LDAD triggers template is too restrictive. (**DR 4865**)

Several entries in the LDAD triggers template do not create useful PILs when matched with the ldadSiteConfig.txt directives. For example, in the QC products (00nQCa), the XXX matches the local site ID, while the directive ww1 used in the template may use the AFOS node for other reasons.

Workaround: Users need to go in and edit their triggers. Refer to the System Manager's Manual for more information on editing triggers.

5.0 SYSTEM

5.1 Decoders

• **Problem:** The *MaritimeDecoder* does not decode Coast Guard reports. (**DR 3697**) These reports are used by the Hourly Weather Roundup.

Workaround: None.

• **Problem:** LightningPlotInventory acquisition has a logic flaw. (**DR 4519**) The constructor for the LightningPlotAccessor class uses a time range to obtain CG lightning data. It uses the LightningPlotInventory class to get the valid inventory from that time range. However, if that time range overlaps the hour (ie: 1358 to 1404), the function LightningPlotInventory::numRecords() fails to count ANY lightning data. It fails because it uses the minutes as a loop variable, but when the end time minutes (04) is less than the start time minutes (58), the loop is never entered.

Workaround: There is a small chance of losing lightning data at the top of the hour. However, this is unlikely because no data selections currently on D2D cross hour boundaries.

5.2 Failover/Reboot

• **Problem:** When LS1 is not reachable, the DS failover takes a long time. (**DR 2136**) When LS1 is not reachable, the time to failover the DS package takes at least 2 more minutes. The scripts *startLDAD.csh* and *stopLDAD.sh* have to time out to detect that the server is not reachable.

Workaround: None.

• **Problem:** First Red Banner is not received when failing back an AS swap package. (**DR 2494**)

When failing back either AS swap package to its primary, the first Red Banner message announcing a swap is in progress seldom appears on the D2Ds. The second Red Banner message announcing the swap is completed is successfully received.

Workaround: None. This does not affect the operation or success of the failover.

• **Problem:** The process monitor shows LAPS as being in a red state during a failover of AS1 to AS2. (**DR 3737**)

When AS1 is failed over to AS2, LAPS processes are not supposed to run. The process monitor reports this by showing LAPS processes as being in a down (red) state. This is correct, but this may make a site think it can restart the processes. This would be a mistake, causing other processes to be restarted but not fixing LAPS.

Workaround: None. Do not attempt to restart LAPS when either AS is in failover mode.

• **Problem:** Simpact failover is slow when DS1 is disconnected from the FDDI ring. (**DR 4562**)

When a Simpact failover is performed while DS1 is disconnected from the FDDI ring (or possibly also if it is powered off), the Simpact swap slows to a crawl, and the following time out message is displayed 4 times "rcmd: connect: ds1-<site>: connection timed out". The swap eventually completes, but this adds about 4 minutes to the swap time.

Workaround: If possible, ensure that DS1 is connected to the FDDI ring before performing a Simpact failover, even if DS2 is the primary Data Server at the moment.

• **Problem:** Process Monitor becomes confused during failover. (**DR 4856**)

During failover, the Process Monitor becomes confused about which system it is running on. As a result, processes are shown running on several systems.

Workaround: Ignore the monitor during the failover and then wait a few minutes for things to sync up.

• **Problem:** First attempt at using message handling after swapping to DS2 fails. (**DRs 5090, 12600**)

The first attempt to send a message from the text workstation via message handling after swapping to DS2 sometimes does not succeed. An error message pops up on the text workstation stating "Message Handling System error: no response from MhsServer". As a result, the product never gets sent out.

Workaround: The second and all subsequent attempts appear to be successful. Send a test message after swapping to DS2 to verify transmission.

• **Problem:** The LDAD *MakePROCpage* process sometimes hangs on a DS swap. (**DR** 5197)

The *MakePROCpage* (which runs on as1f) may hang on a DS swap causing the LDAD internal data monitor to stop updating. The process hangs on a call to *fping*. The problem seems to be that the *fping* call fails because of the momentary loss of NIS - in

effect no hostnames can be resolved. Unfortunately *MakePROCpage* is unable to recover.

Workaround: Kill *MakePROCpage* and the *fping* process. The fxa cron will then restart the *MakePROCpage* process.

• **Problem:** The *asyncScheduler* sometimes fails to die or restart during AS swaps. (**DR** 5212)

The *asyncScheduler* at times does not die on AS1 during a swap to AS2, although it does start successfully on AS2. Other times, it dies during the swap but does not restart on the server that is starting the AS1 swap package.

Workaround: After a swap of the AS1 swap package, check each AS for the *asyncScheduler* process. If the process is found on the server that the package was swapped from, kill it. If the process is not found on the server that the package was swapped to, as fxa, type /awips/fxa/bin/startAsyncScheduler.

• **Problem:** WWA hangs during a DS failover. (**DR 6013**) If the WWA application is running during a DS failover, it will hang and eventually crash.

Workaround: Restart WWA after a DS failover.

• **Problem:** IFPS has SQL errors after DS failover. (**DR 6014**)
If the IFPS master menu is running during a failover, the SQL commands issued by the Master Menu will fail after the failover.

Workaround: Any applications launched from the Master Menu are OK. Stop and restart IFPS to correct any problems.

• **Problem:** Green times and auto-updating sometimes break after an AS1 swap to AS2. (**DR 6518**)

Green times may stop updating and auto-updating may break on all existing D2Ds after an AS1 swap to AS2.

Workaround: There are 2 workarounds:

- 1) Close out existing D2Ds and start new ones, which will then have green times and auto-updating working.
- 2) Bounce the *notificationServer*, after which green times and updating will work on existing D2Ds.
- **Problem:** *MetarDecoder* reports numerous errors for a period of time after a DS swap. (DR 6521)

After a DS1 swap to DS2, the *MetarDecoder* reports numerous errors for a period of time when trying to decode products. The period of time is about an hour.

Workaround: None. The METAR reports are stored successfully despite these errors.

• **Problem:** The /opt/informix partition becomes stale on the workstations during DS swap. (**DR 9078, formerly DRs 6519 and 7324**)

Some processes may remain connected to /opt/informix during a DS swap, causing the partition to become stale on one or more workstations. It has been known to occur when hydrology applications are running on the workstation.

Workaround: Kill the process(es) that is still accessing /opt/informix and execute the **umount/mount** commands.

• **Problem:** The *MetarDecoder* sometimes fails to re-register and loses data after a DS Swap. (**DR 9303**)

The decoder continues processing data, but then loses the data when the following errors occur in the decoder log:

17:23:51.222 METARroutines.C PROBLEM: NCF_FAIL Problem Storing the report-1 17:23:51.816 NetcdfPointData.C PROBLEM: unable to write lastInBin

17:23:51.817 METARroutines.C PROBLEM: Null pointer returned for netcdf file id from getFileHandleAndRecord.

17:35:03.195 C_hmHMU_logError.C BUG: ERROR, severity level MAJOR, in function/subroutine "store report":

Report insert error for sequence number 0, SQLSTATE = 07003, SQLCODE = -404

Workaround: If the above errors are observed in the *MetarDecoder* log after a DS swap, kill the decoder and allow it to be restarted automatically by its DataController.

• **Problem:** Service Guard may generate core files during system reboot. (**DR 10418**) If Service Guard does not handle a site system reboot smoothly, it may generate huge core files in ds1:/var/adm/crash/. This causes /var to fill to 100%. The INDEX file indicates a "TOC" error in these situations. This appears to only happen with K-series servers.

Workaround: The reboot completes successfully despite this problem. Simply remove the core files from /var to avoid filling up the disk space.

• **Problem:** WarnGen is very slow to create text if D2D is not restarted after a DS swap. (**DR 10678**)

If a D2D is not restarted after a DS swap occurs, a WarnGen session run from that D2D will take one to two minutes to create text on the text workstation when the Create Text button is selected in the WarnGen GUI.

Workaround: Restart all D2Ds after a DS swap occurs.

• **Problem:** Some WWA messages log to the DS swap package control log. (**DR 10683**)

Workaround: Refer to the DS swap control log in addition to the WWA log when analyzing WWA operation.

• **Problem:** SIMPACT failover does not execute cleanly when dsswap is on DS2. (**DR** 11324)

When executing a SIMPACT failover while the dsswap package is on DS2, the *CP_Reconfigure* script returns the following error:

rcmd: connect: ds1-osfw: Connection timed out.

The VIRs swap over, but the logical software links do not (in /awips/fxa/bin).

Workaround: Contact the NCF for assistance in re-establishing radar connectivity on SIMPACT 2.

• **Problem:** LSR may not function properly after a DS swap. (**DR 11969**)

Workaround: Log out of, and back into, the workstation and LSR will then function properly.

• **Problem:** Configure Autofax fails to send faxes while failed over on DS2. (**DR 12567**)

Workaround: Send faxes manually from the text windows.

• **Problem:** Verification is slow to launch on the Linux workstation when dsswap is running on DS2. (**DR 12587**)

The Verification Setup window and the Verification Matrix Editor take about a minute or two to launch on the Linux workstation when the dsswap package is running on DS2. The application launches within a few seconds on the HP workstations under the same conditions.

Workaround: Wait the required time for the windows to appear, or use the application on the HP workstation.

• **Problem:** The *ingProcMon* process fails to stop on AS1 when failing the AS2 swap package back to AS2. (**DR 12639**)

The *ingProcMon* process for AS2 sometimes continues to run on AS1 following the failback of the AS2 swap package to AS2, in addition to starting up again on AS2. The process summary for AS2 in the Text row of the Netscape Monitor reports it being down.

Workaround: Kill the *ingProcMon AS2* process running on AS1 after the swap is complete.

• **Problem:** Occasionally some scheduled gauge collections fail after a DS fail-back. (**DR** 12742)

Occasionally, after the dsswap package is failed back from DS2 to DS1, scheduled gauge collections may fail, resulting in repeated tell_co errors.

Workaround: Check all scheduled requests after a dsswap failback to DS1. If they are not working, reset them.

• **Problem:** WWA messages sometimes appear in the dsswap.control.log file. (**DR** 12819)

The following message may appear periodically in the dsswap.control.log: /awips/fxa/data/localizationDataSets/STO/nwr_svrt_wrn.wwaProd [summary issue, summary followup, summary clear, summary cancel, summary followup] [issue, followup, upgrade, extend, expand, clear active, clear cancel, cancel, summary issue, summary followup, summary clear, summary cancel]

[0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0] /awips/fxa/data/localizationDataSets/STO/nwr_svrt_wrn.wwaProd

[summary issue, summary followup, summary clear, summary cancel, summary followup]

[issue, followup, upgrade, extend, expand, clear active, clear cancel, cancel, summary issue, summary followup, summary clear, summary cancel]

[0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0]

out fn: STOSUMNW1 --- /tmp/22096/STOSUMNW1

/awips/fxa/data/localizationDataSets/STO/nwr_svrt_wrn.wwaProd

[summary issue, summary followup, summary clear, summary cancel, summary followup

out fn: REVSUMNW2 --- /tmp/23740/REVSUMNW2

out fn: WRKSUMNW1 --- /tmp/29060/WRKSUMNW1

out fn: WRKSUMNW2 --- /tmp/29060/WRKSUMNW2

out fn: STOTORSTO — /tmp/1242/STOTORSTO_599

out fn: STOTORSTO — /tmp/2680/STOTORSTO 600

/awips/fxa/data/localizationDataSets/STO/nwr_tor_wrn.wwaProd

These messages have not been found to be associated with any actual problems.

Workaround: None, simply ignore the messages.

• **Problem:** The process monitor processes are not always killed after a PX failover. (**DR** 13499)

During a PX failover, the process monitor processes (*processSummary.pl*, *MakeSUMMpage*, *MakePROCpage*, *ctrlCpu*) are not always successfully killed on the PX that is being failed over from. This can result in the Netscape Data/Process Monitor displaying incorrect data.

Workaround: Kill the monitor processes on the PX that was failed over from if they are still running there after the failover is completed.

• **Problem:** When DS1 crashes, the dedicated *ORPGCommsMgr* TCP/IP connection fails on DS2. (**DR 13582**)

When DS1 crashes, the dsswap package moves over to DS2, but the dedicated ORPGCommsMgr TCP/IP connection then fails on DS2. This is because, when DS1 recovers, the fxa cron is resident there and tries to start up the *ORPGCommsMgr* process, prior to the dsswap restart on DS2. This sequence of events results in the ORPG (radar side) opening up the link with the DS1 process instead of the DS2 process.

Workaround: Contact the NCF for assistance in restoring the dedicated *ORPGCommsMgr* TCP/IP connection on DS2.

• **Problem:** SUA products do not store locally to the textdb while on DS2. (**DR 13629**) The SUA products do not store locally to the database while the dsswap package is running on DS2. An error message appears in the preprocessSUA.log stating: "Failed to store product to text database."

When executing the textdb -w command from the command line, the following error appears:

"Incoming product is a duplicate in the database. Product will not be stored." This is despite the fact that the product is not a duplicate.

Workaround: None.

• **Problem:** APS products fail to store to the textdb after a DS failover. (**DR 13640**) When sending a text file from the bubble application into AWIPS after a DS failover, a failure occurs storing the product to the text database. The following error appears in the APS log:

TextDBConnection.C PROBLEM: Failure writing to textdb

Workaround: Restart the *asyncScheduler*, and all subsequent products are stored successfully.

5.3 General

• **Problem:** Logging in as oper on Linux produces a message indicating the tabs command is not found. (**DR 10431**)

The /home/oper/.profile produces the following message when the oper user logs into a Linux workstation:

ksh: /home/oper/.profile[17]: tabs: not found

The tabs command does not exist on the Linux operating system, but does exist on HP.

Workaround: This message does not cause any problems and can be ignored.

• **Problem:** The red banner window can get lost behind other windows. (**DR 11372**) The Urgent message window (red banner) pops up to alert the D2D user to certain problems or events, such as a server swap is in progress, or a radar connection has gone down. If the user iconifies the window, a subsequent message will cause it to deiconify and appear in front so that the user can see it. However, if the user pushes the window behind other windows (e.g., by clicking on the title bar of D2D), new messages will not cause the window to come back to the front, possibly resulting in the user missing important information.

Workaround: If the user does not want to acknowledge a red banner message, but does want to remove it from the display screen, iconify it rather than bringing other windows to the front and burying it behind them.

• **Problem:** The *readenv* script may not recreate the /tmp/environs.* files in some cases on Linux. (**DR 11592**)

When the fxa environment changes and the *readenv* script is called, it recreates the environs files in /tmp. However, in some cases this does not happen, and the files just get appended to. For example, if the environs files in /tmp are owned by awipsusr, and the environment changes, the script logs into the Linux workstation as fxa and is unable to remove the files in /tmp. Instead, the files get appended to. This could ultimately result in these files becoming very large, which would cause the sourcing of the environment to take time. There are two problems. First, the -f option for the rm command in *readenv.csh* is missing. Second the -f command for rm on Linux does not work the same way as it does on HP. The -f option for rm on Linux does not allow a user to delete a file owned by another user even if the permissions are 777.

Workaround: None, but operational impact should be minimal. The environs files in /tmp are remade every 30 days when the root cron cleans out /tmp.

• **Problem:** The home directories are writeable by group and world which causes problems with GDM and xauthority files. (**DR 13201**)

Linux expects the /awips/fxa/awipsusr and /awips/fxa/textdemo directories to be unwriteable by group and world (755), but since they are currently 775 the Gnome Display Manager (GDM) creates xauth files in /tmp instead of using the files in the home directory. This causes some applications to fail to launch due to lack of authority.

Workaround: If any applications fail to launch on the Linux workstation, change the permissions on the /awips/fxa/awipsusr and /awips/fxa/textdemo directories to 755 if they are not already set to that.

• **Problem:** The Perl Tcl/Tk extensions are not included in the Perl package delivered with AWIPS. (**DR 13786**)

Workaround: None.

5.4 Localization/Installation

• **Problem:** Basin setup of localization should not run at an RFC. (**DR 8764**) Since the RFCs do not have SCAN/FFMP, the basin setup parts of localization should not run. The errors that are output to the screen may confuse the user.

Workaround: Simply ignore the errors generated during the basin setup of localization if your site is an RFC.

• **Problem:** Design files and virtual field table do not handle dangling delimiter well. (**DR** 9316)

For both the code that parses the virtual field table for gridded data (i.e virtualFieldTable.text), and the code that parses design files for point data (e.g. metarStdDesign.txt), if one leaves an extra dangling delimiter at the end of the line, the code treats the dangling delimiter as an additional blank entry, and often causes behavior that the user does not expect and is very hard to diagnose. In the virtualFieldTable.txt file, the offending delimiter is a vertical bar. In the point data files, the offending delimiter is a space.

Workaround: When performing site modifications to the file types cited above, be sure that no dangling delimiters are introduced into the files.

• **Problem:** ICAT problems. (**DR 9833**)

The following problems exist with ICAT:

- Incorrect formatting of Volume Browser menus
- Duplicate handling of nationalData files
- 'Invisible' text in part of the GUI
- Parts of the GUI are not clear

Workaround: None.

• **Problem:** Setting up the ICAT environment is very difficult. (**DR 9834**)

The procedures for setting up the environment to run ICAT (environment variables, mounting CDs, exporting file systems, etc.) are very difficult and time-consuming.

Workaround: None.

• **Problem:** Localizations (*mainScript.csh*) run concurrently cause file contention. (**DR** 10090)

Attempting to run localizations on multiple workstations concurrently generates errors due to the naming convention of the temporary files the localization generates and uses. The localizations on each workstation try to use the same temp files (e.g., work.bcd, work2.bcd) that are stored in /awips/fxa/data/localization/nationalData.

Workaround: Do not run concurrent localizations on the servers or workstations.

• **Problem:** The LDAD trigger files are not site configurable. (**DR 10676**)

Currently the LDAD site trigger files are preset in the nationalData directory. Normally, files in this directory are baseline files and should not be modified. However, the LDAD trigger files often must be modified since they are not all-inclusive, and localization provides no mechanism for them to be overridden or appended to by files in localization/XXX or /data/fxa/customFiles. Additionally, there are cases when using certain ww1's (in ldadsiteConfig.txt) causes too many triggers or unused triggers to be created.

Workaround: Modify the LDAD trigger files in the nationalData directory as necessary. Be sure to save off any modified files prior to installations, and then replace the saved off files or merge them with the new baseline files as necessary.

• **Problem:** Localization creates unnecessary default RPS lists. (**DR 10697**)

During localization, default RPS lists are created for both dedicated and dial radars.

However, only dedicated radars need default RPS lists. The dial radar default RPS lists that are created are not needed and cause localization to run longer than necessary.

Workaround: None. Simply ignore the default RPS lists that get created for dial radars.

• **Problem:** Linux CPs miss a file when the -radar localization is run on DS1. (**DR 10756**) The CP reads some acq_wmo_parms.* files upon startup to control filtering of data. While most of these files are fairly static and are controlled as part of the national baseline, there is one exception. The acq_wmo_parms.sbn.radar file is created every time a -radar localization is run on the DS. This file is created in /awips/hprt/data, which is no longer mounted on the Linux CP, whereas it was on the HP CP. While the file is recreated every time by the localization, this file only changes if changes are made to the dialRadars file. If changes are made to this file, the Linux CP will never know them.

Workaround: Run the script /home/awipsadm/Update_LinuxCP as root on DS1. This copies the file over to the Linux CPs and reloads the parms files.

• **Problem:** After a localization on PX for grids, the *GribDecoder* logged errors. (**DR** 11029)

After running a localization on PX1 for grids, the *GribDecoder* wrote error messages to stdout while running. However, this did not seem to cause any problems with data processing.

Workaround: None, but no operational impact.

• **Problem:** The *mainScript.csh -auxFiles* localization does not always add the Eta BUFR Sounding pattern to the acq_patterns.txt file. (**DR 11196**)

When running the ./mainScript.csh -auxFiles localization, the createAuxFiles.csh script is not always able to identify a pattern in the

/data/fxa/nationalData/modelBufrAcq_patterns.template file to be added to the /awips/fxa/data/acq_patterns.txt file. The result is that the Eta BUFR sounding data is not ingested by AWIPS. For example, this problem occurs at some WR AWIPS sites. Using LOX as an example, LOX's latitude and longitude in the /awips/fxa/data/localizationDataSets/LOX/modelBufrClip.sup file is 34.30895615 and -119.472923. LOX should use the JUSB45 KWNO product, because LOX's latitude is between -30 and 42 and LOX's longitude is between -109 and -140. However, the ./mainScript.csh -auxFiles localization was not able to identify any regionalized Eta BUFR data set in the modelBufrAcq_patterns.template file for LOX.

Workaround: The resolution for LOX was to change the latitude to a positive number. In the /data/fxa/nationalData/modelBufrAcq_patterns.template file the following line was changed from:

POINT ^JUSB45.* /ispan/bufr/modelSoundings # -30 -109 42 -140 to:

POINT ^JUSB45.* /ispan/bufr/modelSoundings # 20 -109 42 -140

With the modified modelBufrAcq_patterns.template file, the ./mainScript.csh -auxFiles localization was able to locate a matching regionalized Eta BUFR Soundings data set for LOX and add the following entry to the /awips/fxa/data/acq_patterns.txt file:

POINT ^JUSB45.* /ispan/bufr/modelSoundings

• **Problem:** Three chmod errors occur during the OB2 ADAPT install. (**DR 12170**) Three chmod errors occur during the ADAPT install when WWA is being updated: chmod: can't access /awips/adapt/ifps/bin/linux/WWAAdmin.sh chmod: can't access /awips/adapt/ifps/bin/linux/WWAAdmin.tcl chmod: can't access /awips/adapt/ifps/lib/libTktable2.8.so
This is because these files are new in OB2 and have not yet been installed when this chmod occurs, so the chmod fails.

Workaround: None needed.

Problem: Some chmod errors are displayed during the OB3 ADAPT install. (DR 13521) Some chmod errors having to do with the new WWA Help are displayed during the ADAPT install.

Workaround: None needed. The ADAPT install is simply trying to chmod and chown files that have not been installed yet. The errors have no impact on the success of the install.

5.5 On-Line User's Guide

• **Problem:** Keyword links in Netscape Script help windows do not work. (**DR 4120**) The Keyword section at the bottom of all Text Script Netscape help windows has dead end links. There appear to be no defined help pages for these key words.

Workaround: None.

5.6 Printing

• **Problem:** Four panel displays do not print correctly. (**DR 602**)

Printing a 4 panel display produces a mess of all contours plotted on a single map background. An information box appears indicating that printing 4 panel displays is not currently supported.

Workaround: None.

• **Problem:** RFCs cannot print to lp3. (**DR 12789**)

Workaround: Print to lp1 or lp2.

• **Problem:** The MMG text products cannot be printed from the text window. (**DR 13260**) The national marine products in the MMG series (e.g. MMGNE1 and MMGSE1) have extra garbage characters on line 3 that prevent the products from being printed from the text window. The extra characters are normally "\x1e", and are only seen via the text window.

Workaround: In a Telnet window, save the product to a text file using **textdb -r NNNXXX** > (**filename**). Then print the file.

• **Problem:** The SEL products do not print from a Linux textworkstation. (**DR 13553**) This may be caused by escape sequences in the headers of some SPC products, and thus may be a problem at times with the SAW, SWO, and MCD products as well.

Workaround: In a Telnet window, save the product to a text file using **textdb -r NNNXXX** > (**filename**). Then print the file.

5.7 Product/Process/System Monitoring

• **Problem:** The Netscape Monitor sometimes stops working or reverts back to a previous date after a server swap. (**DR 4229**)

After server swaps, some panes of Netscape either stop updating from that point on, or revert back to a previous date and then resume updating normally after a few minutes.

Workaround: Reload the Netscape Monitor.

• **Problem:** Running the CPU history monitor from Netscape produces zombie processes. (**DR 5154**)

Running the CPU history monitor from the Ingest Processes section of Netscape produces a zombie csh process owned by fxa on that workstation, and a zombie *cpu-setup.sh* process owned by www on AS1.

Workaround: Both zombie processes die when the CPU history monitor is closed. These zombie processes do not appear to affect the operation of the Netscape, CPU history monitor, or the workstation.

• **Problem:** The native Linux Browser (Mozilla or Konqueror) needs to be set up for AWIPS. (**DR 13361**)

Because of a workaround that requires the use of another Web Browser on Linux (other than Netscape), it is necessary that the other web browser(s) be setup for AWIPS. This means setting up the default home page to be the AWIPS Data Monitor and adding the AWIPS links that were added to Netscape.

Workaround: For Konqueror: To update the home URL modify ./.kde/share/config/konquerorrc in each users directory. To update the bookmarks modify ./.kde/share/apps/konqueror/bookmarks.xml. Mozilla is in user directory .mozilla directory.

• **Problem:** The main ingest restart log never breaks. (**DR 13512**)

The overall ingest restart log, as 1f:/data/logs/fxa/restart.log, which lists who performed what restarts from the Ingest Restart GUI and when and why, never breaks. It would likely take a long time for this log to reach a significant size, but it depends on how often the GUI is used on-site.

Workaround: If disk space becomes a problem, delete and recreate the restart.log file with rw permissions and fxa ownership.

• **Problem:** SAFESEAS is not in ingest restart. (**DR 13515**)
The SAFESEAS processes, *SScontroller*, *SSprocessor*, and *SFSfacServer*, are not included in any of the ingest restart options.

Workaround: Contact the NCF for assistance with restarting any of these processes.

• **Problem:** There are intermittent broken icons in the Netscape monitor. (**DR 13702**) The icon images on the Netscape monitor sometimes appear to be broken, but then reappear upon a refresh.

Workaround: None needed. The information displayed on the Netscape monitor continues to be correct even when the icon images are not displayed.

5.8 Radar System

• **Problem:** When Exit is selected from Alert Areas tool, all the displayed graphics are cleared, not only those associated with the Alert Areas Editor. (**DR 6253**)

Workaround: Re-load all the graphics that are cleared.

• **Problem:** Too much radar data is being stored via the SBN. (**DR 6397**)

For many western sights, the dialRadars.txt file is quite large. The acq_wmo_parms.sbn.radar file, which tells the CP which radar products to keep from the SBN, is created from this file in addition to wmoSiteInfo.txt. All of this radar data is processed and stored on the system regardless of whether or not the site is utilizing all of the sites.

Workaround: Comment out or remove entries from acq_wmo_parms.sbn.radar for sites which are not being utilized or remove those sites from dialRadars.txt.

• **Problem:** Bogus startup of syncComms cs_config1. (**DR 6503**)
At a few sites, there were numerous *wfoApi* logs in /data/logs/fxa/<date> complaining about not being able to start up port 1 because it was not found in the portInfo.txt file. These sites did not have any radar lines connected to port 1.

Workaround: Issue an *icpReset0* to realign the port assignments.

• **Problem:** The ORPG connection to AWIPS is not redundant. (**DR 9939**)

The ORPG only has one connection to AWIPS through the primary wave switch; there is no connection to the secondary wave switch. Thus, if the primary connection is lost, the ORPG connection to AWIPS will also be lost.

Workaround: None.

• **Problem:** The *restartRadar* process writes to fxa's mail. (**DR 10386**)

Workaround: None. Refer to fxa's mail for messages from *restartRadar* as necessary. Clean out fxa's mail manually if disk space becomes an issue.

• Problem: FTMs are issued by all sites with dedicated radar connections. (DR 10795) All sites with a dedicated radar connection issue FTMs when that radar connection is down for maintenance or repair work. However, only the primary site for that radar needs to issue the FTM. For example, MOB is the primary site for the KMOB radar, and JAN has an associated feed. However, when the radar goes down for scheduled maintenance, both MOB and JAN issue FTMs. Even RFCs and Regional offices issue FTMs on the radars from which they have a feed. The result is that multiple FTMs are issued when a radar goes down for maintenance. The only time an associated site would need to issue the FTM is if the primary site is down.

Workaround: None. Ignore the multiple issuances of the FTM product.

• **Problem:** The *RadarTextDecoder* reports an error when attempting to open an STImotion file. (**DR 12594**)

The *RadarTextDecoder* process reports the following for STI products received for the site's dedicated radars:

20:51:48.265 decodeRadarText.C EVENT: Processing file:

Graphic.2003050720514797.KAKQ

20:51:48.271 decodeRadarText.C EVENT: Processing code: 58

20:51:48.272 decodeRadarText.C EVENT: Generating Text Product.

20:51:48.288 textRoutines.C PROBLEM: Unable to open file

/data/fxa/radar/kakq/STImotion/20030507_2051: No such file or directory

20:51:48.296 textRoutines.C EVENT: Writing: WSRSTIAKQ

There is no STImotion directory, although there is an STI directory, and STI products are stored there successfully and are displayable on D2D. As the log shows, the WSRSTIXXX text product does store successfully despite this error message.

Workaround: None.

• **Problem:** The wfoApi.StateInfo file does not get updated completely when the VCP mode changes to VCP 11. (**DR 12837**)

If a dedicated radar is in VCP mode 21 and switches to VCP 11, the *RadarServer* does not change the fifth field for that radar in the /data/fxa/workFiles/wfoApi.StateInfo file from 21 to 11. While radar functionality is not affected by this, this could cause confusion for a user looking at this file.

Workaround: None, but no operational impact.

• **Problem:** The *wfoApi* process can become hung. (**DR 12839**) Infrequently, a dedicated radar's *wfoApi* process can become hung, creating *wfoApi* logs several times a minute reporting a 'null' port value.

Workaround: Execute the *stopRadar* script and then allow the fxa cron to re-establish the active ports.

• **Problem:** A PRR message 'storm' causes major workstation slowdowns. (**DR 12883**) Problems with a site's radar can result in numerous PRR messages being sent to the AWIPS system. This message 'storm' results in a significant slowdown in workstation performance, to the point where the cursor does not respond to commands. For example, this occurred in one case where a site's dedicated radar was having pedestal faults and the radar was 'stuck' in elevation 3.5. The radar problem produced a firestorm of PRR messages in response to the AWIPS RPS List which was sent for every GSM received. The PRR messages caused both the *ORPGCommsMgr* and *RadarMsgHandler* processes to use high CPU time on DS1 and AS1 respectively.

Workaround: Kill the *ORPGCommsMgr* process to restore workstation performance until the radar problem causing the PRR message storm is fixed.

• **Problem:** Not all One-Time Request messages are displayed in the Radar Status Window. (**DR 13143**)

Not all of the messages typically received when performing a one-time request are displayed in the Radar Status window. For example, when making a request, the GSM messages are displayed, but the messages that the requested product has been stored and that the line has been disconnected are not, even though these events do occur. These messages are not displayed until another request is sent.

Workaround: Check the radar logs to verify product receipt, or select the product from the D2D menu to see if it has been stored.

5.9 Site Specific/National Centers

• **Problem:** MEMMTR000 includes METARs it should not. (**DR 6740**)

KNAR reported that a MEMMTR000 request from a text window brought up additional METARs that should not be included (KAHN, KAKQ, KGDB, KJCT, KJUP). These were also listed in the text window browser. It appears that the file used to map the CCC with the NNN may be wrong at least for KNAR.

Workaround: None. The extra data can be ignored.

5.10 System Process/Log

• **Problem:** Decoder log messages. (**DR 1304**)

There are notices in the decoder logs that claim the decoder has not processed a message for periods of time. However, sometimes the times in the logs clearly show that this is

not true. These decoder log messages appear when the logs are broken daily, as well as whenever data ingest is restarted.

Workaround: None. When debugging, ignore this message if the decoder log indicates other activity.

• **Problem:** The *stopIngest* scripts report minor error messages. (**DR 3518**) For example, *stopIngest*.* attempts to stop some processes twice, and thus gives multiple messages:

"/awips/fxa/bin/stopIngest.ds1[50]: kill: The number of parameters specified is not correct."

It usually kills the processes on the first attempt (but not always). The *stopIngest.ds1* and *stopLdadIngest* scripts also attempt to stop unowned processes (ldad *CommsRouter* and *DataController* versus the fxa version) and give the following error: "kill: 21030: Permission denied."

These errors are very minor, but could cause concern for users trying to troubleshoot logs.

Workaround: Ignore the error messages. They do not affect the outcome of the scripts.

• **Problem**: *DataController* logs stop, but do not restart. (**DR 5742**) Sometimes one of the *DataController* logs terminates normally around 0Z, but fails to restart a new log for the new day. The processes are up and running, but new logs are not created.

Workaround: Stop and restart ingest to start the logs again.

• **Problem:** The *notificationServer* may crash with longjmp and out of memory errors. (**DR 9029**)

Infrequently, the *notificationServer* may crash due to out of memory, with longjmp errors reported in the log.

Workaround: Restart the *notificationServer*. D2Ds may then need to be restarted to reestablish green times and auto-updating.

• **Problem:** The Announcer logs do not display the correct time stamps. (**DR 10825**) The SYSTEM and RADAR Announcer logs in /data/fxa/workFiles should display the date at the beginning of each line, but instead are displaying a string of numbers.

Workaround: None.

• **Problem:** The *AircraftDecoder* process infrequently crashes. (**DR 10910**)

Infrequently, the *AircraftDecoder* has crashed with a Signal 11 segmentation violation. When this happens, the AS1 CPU idle time goes to 0%, with the *AircraftDecoder* process running at the top of the list.

Workaround: Kill the hung process and allow it to restart automatically. It will then resume processing successfully.

• **Problem:** An extra space after a pattern in the METARPatterns.txt file causes the *COMMS_ROUTER* to fail. (**DRs 11078, 10634**)

The *CommsRouter COMMS_ROUTER* process will not run if there is a space after any individual pattern line in the METARPatterns.txt file on DS1 and AS1.

Workaround: If site edits are made to this file, ensure that the last character in each line is the last character of the pattern, and that there is not a space after the last character of the pattern. Also, be aware that there is an operating system limit to the size of a pattern that can be handled. It is high enough that it should rarely be exceeded by site edits, but it is possible to exceed it.

• **Problem:** Error reported in *BufrDriver goes* soundings logs. (**DR 11172**) The following error appears in the *BufrDriver* logs for the GOES soundings once or twice a day:

BufrDriver20332as1-tbdw002705:00:27:58.226 NetcdfPointData.C PROBLEM: nClientlessHandles 0 fileOpenCount 12

The log always shows the decoder successfully moving on to the next file after this message.

Workaround: None, but minimal operational impact.

• **Problem:** The master purge log reports - unlink 12hr FAILED: Not owner. (**DR 11412**) The /data/logs/fxa/master.purge.log reports the following errors when purging some directories:

unlink 12hr FAILED: Not owner

However, files placed in these directories do get purged successfully.

Workaround: None, but no operational impact. Files in the affected directories get purged successfully despite this error.

• **Problem:** The *GribImgDecoder* has a memory leak when dealing with products containing a bad Bitmap. (**DR 11528**)

The *GribImgDecoder* experiences a memory leak when the decoder receives a product with a bad bitmap. It starts to leak memory and starts to use up all the memory on the DS. The following is seen in the log files:

14:10:45.629 GribImgRoutines.C EVENT: NCF_ENTRY [1/1] = YEIG98KWNH.20020911 121045.483 122533 bytes

14:10:46.352 GribData.C PROBLEM: Number of elements in the data array does not match the number of flagged values in the bitmap array.

14:10:46.353 Status.C PROBLEM: Status Code: 241 Invalid Bitmap

14:10:46.354 GribImgRoutines.C PROBLEM: NCF_FAIL YEIG98KWNH Problem with unpacking GRIB

14:10:46.371 GribImgRoutines.C EVENT:

/data/fxa/img/SBN/Raw/YEIG98KWNH.20020911_121045.483 renamed to /data/fxa/img/SBN/Bad/YEIG98KWNH.20020911_121045.483

14:12:16.270 GribImgRoutines.C EVENT: NCF_ENTRY [1/1] =

YEIM98KWNH.20020911 121216.047 122533 bytes

14:12:16.723 GribData.C PROBLEM: Number of elements in the data array does not match the number of flagged values in the bitmap array.

14:12:16.724 Status.C PROBLEM: Status Code: 241 Invalid Bitmap

14:12:16.725 GribImgRoutines.C PROBLEM: NCF_FAIL YEIM98KWNH Problem with unpacking GRIB

14:12:16.796 GribImgRoutines.C EVENT:

/data/fxa/img/SBN/Raw/YEIM98KWNH.20020911_121216.047 renamed to /data/fxa/img/SBN/Bad/YEIM98KWNH.20020911_121216.047

Workaround: Remove the bad products from the Raw directory if necessary, and then kill the *GribImgDecoder* manually. It's *DataController* will then restart it automatically.

• **Problem:** The *tfrNarrowband2netCDF* process infrequently hangs and uses high CPU on AS2. (**DR 11645**)

Workaround: Kill the process manually.

• **Problem:** The *notificationServer* may not function properly if only one D2D is running. (**DR 11682**)

The *notificationServer* sometimes has client registration problems when only one D2D is running on the entire site. When this occurs, the following is seen in the *notificationServer* log:

2:51:04.890 NotificationServer.C EVENT: Client: ws2-tbw3/1076/7862 registered for key: 6111

12:52:46.997 StaticTextDict.C EVENT: Rotating buffer cycled for file depictInfo.txt 12:52:47.089 DM_DepictableInfo.C PROBLEM: Unable to read DepictKey 2181358176 from dictionary

12:52:47.089 NotificationServer.C PROBLEM: ws2-tbw3/1072/7751 tried to register invalid depict key: 2181358176 Ignoring ...

Then, if that lone D2D is shut down, the following is seen in the log:

12:55:43.061 NotificationServer.C EVENT: Received depict cancellation request. Client: ws2-tbw3/1072/7751 Num keys: 8107

12:55:43.082 NotificationServer.C DIAG: Depictable never registered: 2181358176

13:01:08.012 NotificationServer.C EVENT: Received depict cancellation request. Client: ws2-tbw3/1086/7872 Num keys: 1

After that, the *notificationServer* hangs for about five minutes and starts using 80%+ of the CPU on AS1.

Workaround: This will mainly only be a problem after an install, or any other time when the system has to be totally logged out. After such an install, start two or more D2Ds together when first bringing the system back up. During normal operations, ensure that there are always at least two D2Ds running at the site at any given time.

• **Problem:** The *SynopticDecoder* process sometimes decodes the wrong date for products. (**DR 11928**)

The *SynopticDecoder* stores data with the wrong date when data from the last day of the month are processed on the first day of the month. This causes a few frames of data to be out of place since they have the wrong date.

Workaround: None, but the data are still displayable on D2D, they just may be presented out of order in the loop of frames.

• **Problem:** A PROBLEM message is sometimes reported in the *BufrDriver* logs. (**DR** 12368)

The following PROBLEM message is seen in the *BufrDriver goes* and *hdw* logs a few times per day:

09:57:43.546 NetcdfPointData.C PROBLEM: nClientlessHandles 0 fileOpenCount: 18

Workaround: None, but no operational impact. GOES and HDW products are still processed and stored successfully despite these messages.

• Problem: POES and GOES sounding data are stored twice at some sites. (DR 12542) This is because the entries for these data are listed twice in the acq_patterns.txt file on PX2. The acqserver reports the following when processing this data: acqserver 21928 00:28:26.520 EVENT: NCF_ENTRY: JUTX06 KNES 250027 Cat: POINT 104295 #85408234

acqserver 21928 00:28:26.520 EVENT: NCF_STORE: JUTX06 KNES stored in /data/fxa/ispan/bufr/GOESSoundings/JUTX06KNES.25002826.295 acqserver 21928 00:28:26.520 EVENT: NCF_STORE: JUTX06 KNES stored in /data/fxa/ispan/bufr/GOESSoundings/JUTX06KNES.25002826.295 acqserver 21928 00:28:26.521 PROBLEM: NCF_FAIL link failed 4: /data/fxa/tmp/point/JUTX06KNES.25002826.295

/data/fxa/ispan/bufr/GOESSoundings/JUTX06KNES.25002826.295 File exists The data are still stored and then processed by the appropriate *BufrDrivers* successfully despite this problem.

Workaround: None, but no operational impact.

• **Problem:** The grid product ZHUE12KWBN is stored twice on PX1. (**DR 12596**) The grid product ZHUE12KWBN, which is the HPC Delta grids, is stored twice by the acqserver on PX1 as follows:

acqserver 19322 19:17:35.498 EVENT: NCF_ENTRY: ZHUE12 KWBN 081200 Cat: GRID 15372 #225391651

acqserver 19322 19:17:35.498 EVENT: NCF_STORE: ZHUE12 KWBN stored in /data/fxa/Grid/SBN/Raw/ZHUE12KWBN.20030508 121735.372

acqserver 19322 19:17:35.498 EVENT: NCF_STORE: ZHUE12 KWBN stored in

/data/fxa/Grid/SBN/Raw/ZHUE12KWBN.20030508_121735.372

acqserver 19322 19:17:35.578 PROBLEM: NCF_FAIL link failed 3:

/data/fxa/tmp/grid/ZHUE12KWBN.20030508_121735.372

/data/fxa/Grid/SBN/Raw/ZHUE12KWBN.20030508_121735.372 File exists

This is because the acq_patterns.txt file picks up the product twice with the following entries:

GRID ^[YZ].[A-WYZ].*KWB.* /Grid/SBN/Raw

GRID ^Z.U.*KWBN /Grid/SBN/Raw

However, the product does get stored and subsequently processed successfully, and is displayable from the Volume Browser.

Workaround: None, but no operational impact.

• **Problem:** The FRUS45 product does not get sent to the *StdDBDecoder*. (**DR 13021**) Product FRUS45, a TWB product, does not make it past the *DataController* on AS2. There are entries in the *DataController* log for receipt of this product, but there is no mention of the product in the *StdDBDecoder* or *CollDBDecoder* logs, and the product is not stored.

Workaround: None.

• **Problem:** Multiple Segmentation 11 and longjmp errors appear in the *notificationServer* log. (**DR 13346**)

Workaround: Normally the *notificationServer* will continue to function properly despite these errors. However, sometimes these errors may lead to notifications failing to reach the workstations, or to the process itself hanging or crashing. In these cases, contact the NCF for assistance.

• **Problem:** The *notificationServer* infrequently crashes on a non-existent product version. (**DR 13475**)

Infrequently, the *notificationServer* crashes attempting to request a version of a product that does not exist.

Workaround: Contact the NCF for assistance.

• **Problem:** The *CommsRouter COMMS_ROUTER* logs an error upon startup. (**DR** 13516)

The *CommsRouter COMMS_ROUTER* process on DS1 logs an error upon startup as shown below.

19:12:10.466 IPC_Target.C PROBLEM: Can't name IPC_Target: @^C{^CM-8x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-9M-x{^CM-y}}}}}}

Workaround: None needed, as this error is not known to cause any problems operationally.

• **Problem:** Infrequently, the *asyncScheduler* process log reflects a PID number different from the active process. (**DR 13738**)

For example, the currently active process ID may be 29724, but the log may show 29709.

Workaround: Data processing should continue despite this discrepancy in PIDs, but if problems are observed in processing, restart the *asyncScheduler* process using the ingest restart GUI. If this fails to synchronize the PIDs, call the NCF.

5.11 Wide Area Network (WAN) Communication/Message Handling

• **Problem:** Requests are not queued when the *MhsRequestServer* is down. (**DR 3820**) Requests that are made through the Request/Reply function when the *MhsRequestServer* is down are not acknowledged by the *MhsRequestServer* and are thus lost.

Workaround: None.

• **Problem:** MHS - error deleting nack file. (**DR 4090**)

The *MhsServer* errors when trying to delete a nack file after notifying the user. The error message is as follows:

02:06:05.768 MhsWfoProduct.C PROBLEM: Error deleting nack file: /data/fxa/mhs/nackg/TBW3-16123.doc: No such file or directory.

The reason is the file is actually named TBW3-16123-TBW4.doc.

Workaround: This should not be a problem, as the *MhsPurger* daily cleans out this directory. The *MhsServer* handles ack file names correctly and is able to delete them.

Problem: A short WMO header is logged on inter-site coordination products. (DR 9203)

MHS thinks that products sent via WarnGen or WWA to neighboring sites via MHS are missing the first two characters of the WMO header. This can be seen in the *msgreq_svr* and *msgrcv_svr* log entries:

TBDW-333135 US66 KMTR 121903 should be WWUS66 KMTR 121903.

This does not affect processing of the products at the receiving site, but does make it difficult to track the products via the logs.

Workaround: None, but no operational impact.

6.0 OCONUS

6.1 Hydrology

• **Problem:** Alaska hydrology data is not ingested. (**DR 4534**)
A large portion of Alaska's hydrology (SHEF) data has a header of SRUS32.KWOH.
This is not in the baseline /awips/fxa/data/acq_patterns.txt file. The Alaska sites have it in their acq_patterns.txt file, but this file will be replaced during the installs.

Workaround: The workaround is to add additional acq_patterns that they want to their /awips/fxa/data/localization/<site>-/<site>-acqPatternAddOns.txt file.

6.2 Install/Localization

• **Problem:** Localization errors occur on the OCONUS system. (**DR 9527**) The following errors are seen during localization on the OCONUS system: running makeClipSups.csh

grep: can't open /awips/fxa/data/lampGrid%%%nx%%%ny.cdl grep: can't open /awips/fxa/data/lampGrid%%%nx%%%ny.cdl grep: can't open /awips/fxa/data/lampGrid%%%nx%%%ny.cdl grep: can't open /awips/fxa/data/lampGrid%%%nx%%%ny.cdl insufficient arguments for corners option.

Workaround: None, but no operational impact. These errors can be ignored.

• **Problem:** The /awips.install/host_config_file is incorrect for the GUM CPs. (**DR** 12792)

The GUM CP entries should show 4 demods, rather than 2:

cpsbn1-gum pr.awips.noaa.gov 165.92.174.50 4

cpsbn2-gum pr.awips.noaa.gov 165.92.174.51 4

This problem applies only to GUM and will be noticed only when a GUM CP is reloaded from an image.

Workaround: If a CP is reloaded from an image, edit the host_config_file for the appropriate entries and re-run start_newhost.

6.3 IFPS/WWA

Problem: WWA at AFC exhibits highlighting problems in the Geo Viewer. (DR 10476)

On a test system localized to AFC, WWA exhibits some highlighting problems. At first, all desired zones are highlighted with no problems, but after creating new products or changing Color Key preferences in the Geo Viewer, some of the islands become un-highlighted. If the user then selects the zone adjacent to the mysteriously un-highlighted zone, that zone will become un-highlighted and the zone in question will become highlighted.

Workaround: None. Use care when highlighting the zones over the islands.

6.4 LAPS

• **Problem:** The *lvd_sat_ingest* script looks for westCONUS data. (**DR 11214**) At OCONUS sites, the *lvd_sat_ingest* script looks for data in /data/fxa/sat/SBN/netCDF/westCONUS, but there are no files in this directory at these sites. The projections available at the OCONUS sites are different, and LAPS is not set up to use them. LAPS runs without any problems even though it cannot find the satellite data, but of course it is thus not using all of the data available to it.

Workaround: None.

Problem: The LAPS relocator GUI center point does not change position on D2D. (DR 13106)

At some Alaska sites (and possibly other OCONUS sites), the LAPS relocator GUI does not allow the user to change the center point of the LAPS domain by moving it on the D2D. At CONUS sites, there is a dotted box that defines the boundaries of the allowed domain for the LAPS center point, but on the Alaska sites, there is no such box.

Workaround: Set the center point manually by modifying the latitude and longitude numbers in the LAPS Tools GUI.

6.5 Map Features/Legends

• **Problem:** State/County Boundaries Legend appears twice at Alaska sites. (**DR 4524**) If "State/County" is selected from the "Maps" menu at State scale, a second State/County map legend appears in addition to the default State/County map feature. The two map features are almost identical and can be distinguished only by zooming in very close.

Workaround: Remove one of the duplicate map features manually if desired, but the presence of duplicates does not appear to cause any problems.

6.6 Product Maker

• **Problem:** Longitude is not available far enough to the west in Product Maker. (**DR** 2537)

Choices in the Longitude menu of the Product Maker only go west to 180W. Longitudes beyond this are not available selections.

Workaround: None. Restrict longitude selections to 120W or less.

• **Problem:** Cannot load satellite images from Product Maker for Guam. (**DR 4459**)

The user cannot load any satellite images from Product Maker for Guam at any scale.

When you try to load the image the following Tcl error is displayed:

Error:can't read "keyname": no such variable.

Workaround: None.

6.7 Satellite

• **Problem:** The GOES Sounder Imagery CONUS sectors should be removed from OCONUS sites. (**DR 13545**)

CONUS GOES Sounder Imagery does not display or loop properly at OCONUS sites. This is due to the non-matching times of the scans and because the CONUS area is somewhat (or completely) off the OCONUS maps. Therefore, the CONUS imagery should be disabled at Pacific Region sites. For the Alaska Region, all East CONUS imagery should be disabled (the West CONUS imagery should be retained, since it is somewhat relevant to Alaska sites). Also, GOES Sounder Imagery should be disabled on the relatively local scales of the Alaska sites (i.e., Aleutian & Mainland).

Workaround: None needed. Although the GOES Sounder Imagery menu options are enabled at OCONUS sites (i.e., not greyed out), no harm is done if the menu items are selected. The products are simply not displayed.

6.8 System Process/Log

• **Problem:** RAMOS data are not stored in October. (**DR 13577**)

This problem only occurs in October. The problem is that the RamosDecoder is "fooled" into thinking that the month number for October (10) at the beginning of the line is an incorrect line feed (A hex = 10 decimal). This results in the following message:

"RAMOS id: KDENSXAK50 not found in Station Table."

instead of

"RAMOS id: 15D56172 not found in Station Table."

The culprit is the byte in the CCB that is supposed to contain the month number. Instead it is interpreted as a line feed and results in the data not being stored.

Workaround: None.

6.9 Volume Browser/Grid Products

Problem: Volume Browser has RUC40 listed in the source. (DR 6436)
 The RUC40 model is listed in the Source menu of the Volume Browser at OCONUS sites. However, this model only covers CONUS sites, and thus is not displayable at OCONUS sites.

Workaround: None.

7.0 Additional Radar-Related DRs

• **Problem:** Three 4-panel radar products can not be displayed. (**DR 13989**)
Can not display the following products from the kxxx four panel pull down: Comp 0.5
VIL mx, VIL Comp Max2 Max 3, and Tot 1hr 3hr 0.5. The IGC_Process log will report
'Unable to read key: <depict key> from the MultiLoad table.'

Workaround: None.

• **Problem:** Problem with All Tilts Z/SRM8 load. (**DR 13990**)
When loading the All Tilts Z/SRM8 product occasionally the 4-bit 0.5 Reflectivity loads then an error message will appear saying the 8-bit data is unavailable. After a pause of

up to one minute the data will then load. This is seen for each elevation angle. It has also been seen where the error message appear but the 8-bit data is loaded as soon as its available from the ORPG. The 4-bit does not display at all.

Workaround: None.

8.0 Additional WarnGen Related DRs

Problem: WarnGen Text Comparison Bug (DR 13979)
 Sometimes WarnGen does not correctly interpret template variables in logical operators that control bullets.

Workaround: Place the following at the beginning of any template using variables in logical operators { [TUV.in.TUVTUV] | <VAR |lead=dummyText |var=dummyVar> }